4: Up de Graff--187-189 (1897) 1923 Jivaro-1
116, 361, 576, 721

"We noticed a sheltered creek on the left bank which had not been visible before. A few strokes more and it was in view. On the hillside above, some two hundred yards from the bank, a bright yellow patch among the dark-green forest, stood a Jívaro shack. [188]

The sight of that hut on the hillside was as good to us as water to a man dying in the Sahara. We felt a new strength, and the word 'fear' had no meaning for us. All we thought of at that moment was that there lay our goal, a few hundred yards ahead. Of the difficulties and dangers which lay in our path, not one thought crossed our minds. To push ahead was all that mattered.

And then we saw human life. Four Antipas, long-haired and stark naked, were crossing the stream ahead of us in a dugout. Indifferent as to the effect it might have on them, we gave a yell, in which was voiced all the pent-up joy which was in our hearts at meeting our own kind after the weary search which lay behind us. If we had stopped to think a moment, we should gave realized that a whoop such as we let fly could carry but one message to a Jívaro--war.Those four in that dugout did not even stop to turn their craft. They stood up, faced about, and paddled hard astern for their lives, throwing the water eight full feet into the air, and racing for the left bank where (as they thought) safety lay. No sooner had they landed than the Boom-boom, Boom-boom of the call to arms came floating across the water to us, to be taken up in fifty settlements all round the country. Clearly it was to be war. Little we cared, however--not because we were particularly brave, but rather particularly hungry. And after all, [189] approaching on the water and

armed with Winchesters, we had little to fear from spears. Following the flying dugout we came upon some twenty more pulled up on the beach, and we made our way to the landing-place and hauled ashore. Then broke out a storm of war-whooping and howling which beggars description. The object, of course, was to impress us with the idea that we were faced by innumerable warriors. There was nothing, or almost nothing, to be seen of the savages, sheltered as they were behind the thick palisades of split palms which surrounded their huts and which could be guaranteed to stop even a bullet from our rifles."

4: Up de Graff--189-190 (1897) 1923 Jivaro-1
116, 721, 609

"We had not come for war, and somehow an end had to be put to this clamourous deadlock. There seemed no end to the capacity of those Jivaros' lungs. For three long hours they yelled, with varying intensity. At times I would start up the bank in an attempt to get into conversation, but each time they took it for a hostile movement on our part and redoubled their efforts to persuade us of their strength.

The spell was broken in the end by my leaving my rifle with Game in the canoe and walking slowly up the trail which ran up in full view of the barricaded house nearest to us, suffering agony from my raw feet, but managing to cover the ground by reason of the soft sand. It was not more than a matter of fifty yards all told. I had gone a little more than half-way (with my six-shooter slung out of sight) when there emerged from the hut three quaking youths. The unfortunates had evidently been chosen for a parley much against their will, for I do not exaggerate when I say that their knees would barely hold them and their 'walk' resembled that of a man sick of the palsy. Indeed I was convinced at the time that they were really sick--that perhaps some disease had swept through the whole tribe of Antipas. I tried to [190] open the negotiations in Inca, in Spanish, and with every odd scrap of every language at my command, but all to no purpose. The Jivaro dialect was at the time unknown to me. I then attempted to calm them by offering my hand. The custom was evidently unknown to them for they searched my palm attentively to see what present I might be bringing. Finally I resorted to gesture--motioning them to the canoe as if to invite them to see what we had. They were for making me go

first, but it is a safer rule to go last. So down we went in single file to where Game was sitting with his rifle across his knees, nursing his feet."

"We had been careful to bring with us an assortment of trade-goods--a few beads, some small round looking-glasses, and (most successful of all) a supply of their own particular brand of poison. This latter we carried in sections of bamboo cane, about an inch in diameter and six inches long. The poison is poured in after removing one of the knots or partitions which grow at regular intervals, and the cup thus formed, when full, is closed with a palm leaf tied down with a strip of bark; the latter is put on green, and when it dries it automatically tightens up, sealing this natural receptacle as securely as a jam-pot

Once they began to take an interest in the presents, things went swimmingly. Little by little the howling of the tribe in the huts behind the undergrowth had died away, open hostility gave place to confidence, more and more savages slipped down to the canoe to see what we had, urged thereto by their companions who had already done so, and little by little friendly relations were established. Finally, their curiosity, nursed by the evident delight of their men-folk at the treatment they were receiving at our hands, overcame the women of the settlement. Down they came to the bank, each one bearing an enormous gourd full of giamanchi, first in one and twos [191] and then in one great stampede. The etiquette in connection with the welcoming of guests, be they friends or strangers, is rigid and extremely burdensome to one whose stomach is not accustomed to receiving unlimited gallons of liquid. A rough estimate proves that there must have been presented to us in all some 600 gallons of giamanchi, all of which we were expected to

drink if possible. If not, we were at any rate bound to taste each one of the gourds which were brought down to the river by the some 300 wives of the numerous warriors who were assembled on that beach. For refusal to accept food at the hands of any one of the women, who represent their lords in this ceremony, is sure to incur grave displeasure. After the tenth drink or so Game, who was of a distinctly independent turn of mind, began to protest to me in no uncertain terms that he would 'see himself dead before he would touch another drop.' I implored him at any rate to go through the motions of imbibing, to which he eventually allowed himself to be persuaded. And so we solemnly raised every one of those nauseating receptacles to our lips, and were at peace with the Antipas."

4: Up de Graff--191-192 (1897) 1923. Jivaro-1
116, 153, 201, 624

"We were flooded out by the human tide. They clambered into the dugout, delved into everything they could lay hands on, and behaved generally like a crowd of school children to whom the free run of a candy store had been given. They chattered, grinned and gesticulated; they held our trumpery trade-beads up to the light and tried the effect of wearing them; they gazed spell-bound into the hand-mirrors which we had rightly regarded as one of our strongest lines; and finally they were completely overwhelmed by the shoddy striped cotton shirts which the favoured few among the men donned with all the exquisite satisfaction which a youth fresh from school experiences when first he puts on a 'swallow-tail.'

So the ice was broken. But no conversation had taken [192] place as yet, for conversation was impossible. We found that the language spoken by the Antipas was quite unintelligible to us, and that Inca, the only Indian tongue I knew, was unknown to them. Progress was made, however, in the sign-language which is common, to a greater or lesser degree, to all men. They made it clear to us that they wanted a token to send to their chief, a sign whereby the truth of their incredible report of the arrival of white men in the land might be impressed on him; seeing us using machetes they seized on them as serving their purpose well. Three they sent by special envoy to the Chief, and three more they sent a little way down-stream to a point where there was a trail along which he might be expected to pass if the envoy missed him; there the machetes were stuck into the earth as we pile arms in the field. He would be sure to see them, and would be put

on his guard.

And so we sat down to await his arrival."

4: Up de Graff--192-193 (1897) 1923 Jivaro
116, 101, 361, 721

"A few words about this tribe will not come amiss, as they played such an important part in our personal history during our search for the Inca gold, and are, indeed, one of the only six known head-hunting tribes of the Amazon zone, grouped under the common name Jívaros, the others (all their enemies) being the Huambisas or Pantecunas, the Aguarunas, the Muratos and the Zaparos. To form an estimate of the relative strengths of these peoples is more than I dare attempt; their migratory habits and their custom of living in small scattered settlements hidden in the dense jungle makes it an impossible task. Indeed, one of the main points of their policy is to conceal from one another not only their whereabouts but also their fighting strength, even going so far as never to use the same trail twice, if possible, in approaching their homes. For these reasons an air of complete mystery surrounds the whole region, [193] and the casual white invader stands no chance of obtaining accurate statistics."

4: Up de Graff--193 (1897) 1923 Jivaro
116, 142, 304, 481

"The personal appearance of the Antipas is briefly as follows: The men are shorter than we are, averaging avout 5 feet 6 inches, are muscularly built, and many are covered with the scars of spear wounds, the marks of warfare; they are swifter of foot than we, compare well with monkeys in agility (they are wonderful tree climbers) and are all apparently well-nourished and well-conditioned. From childhood up they have their front teeth filed to a sharp point and coated with a jet-black shining vegetable pigment which produces the same effect as nitrate of silver. The hair on the top of their heads is the only hair on their bodies, but that is magnificent. It falls on an average to their waists, sometimes even as far as their knees, is jet-black, straight and glossy. They wear it flying loose like a thoroughbred's mane before it is cropped, only occasionally winding it round their necks as, for example when they are weaving or cooking, and coiling it on the tops of their heads, as a Turk would his turban when travelling or hunting in the forest. They seldom adorn it with feathers or other ornaments. Their skins are more chocolate than red-brown. Technically speaking, they cannot be described as 'red-skins' under any circumstances; occasionally we met with signs of their having mingled with the colonials of Borja whose women their ancestors carried off into captivity. Their eyes are invariably black when uninfluenced by this intermarriage with the white race. We met a few with a trace of whiskers. Their toes are splayed like those of all bare-foot savages, and they make considerable use of them as secondary hands."

4: Up de Graff--193-194 (1897) 1923 Jivaro
116, 152, 301, 555

"They are singularly free from the love of personal adornment which is a characteristic of nearly all savage and semi-savage people. Indeed there is only one orna[194]-ment which they wear, a small tuft of toucan or stork feathers fastened to the lobe of the ear. Furthermore these are worn but infrequently, that is to say for battle or on the occasion of great festivals; finally, the wearing of these feathers is a sure sign of the owner's prowess in the hunt, for to kill either bird with their only means of bringing down game, the blow-gun, is proof of great skill and strength, the toucan always lives among the topmost branches of tall trees and the stork is equally shy; we could never approach within 500 yards of the latter."

4: Up de Graff--194 (1897) 1923 Rivers
116, 142

"As for the facial characteristics of these men they resemble the Mongol type far more than they do the North American Indian; the form of their face, their eyes, and the lack of hair on their chins are reminiscent of the Chinese."

4: Up de Graff--194-195 (1897) 1923 Zivaro-i
116, 304, 153

"They are given to tattooing themselves, but only to a limited extent. They mark their limbs with simple little designs--a cross, or a circle, or a wavy line; they never indulge in the showy designs of races such as the Japanese who have brought this form of ornamentation to a high art. The process is simple. With a thorn they prick the required pattern on their skins, drawing blood; they then hold a lighted piece of crude rubber under the prepared area until it becomes well coated from the black smoke given off by the rubber; finally, they rub the soot into the wounds, and blue marks similar to powder burns are left in the skin. Where they learned this art, I do not know; it would, as a matter of fact, appear to be indigenous. The contrary being the case, they would be more likely to make it a universal practice and to show signs of an exterior influence. When called upon by the medicine-man (the Antipas, as far as I could discover, only had one) to tattoo him with some distinctive design, the first thing which occurred to me was the [195] Psi Upsilon badge of the fraternity to which I belong. If any of my fraternity-brothers ever make their way to those parts, they will probably be greeted by a large and flourishing new Chapter (let us call it the 'Pongo Chapter'), for the idea appealed to the tribe so strongly that, within a few months, the design had been copied with considerable skill by quite an appreciable number of warriors. I assured their chief that should he meet any 'member of my own tribe' and show him the sign which he carried on his arm he would be received with open arms and greeted as a brother. Incidentally, we happened to leave a packet of the well-known 'L. L. F.' brand of cigarette papers

lying about; shortly after, we found an excellent replica of the three letters tattooed on a savage; while we were there, we noticed quite a few who had joined the Lamda Lamda Phi's." [sic]

4: Up de Graff--195 (1897) 1923 Jivaro
116, 302, 141, 482

"Passing on to the women of the tribe, there are a few outstanding characteristics to be noted. Their hair is not allowed to grow much below the shoulders, in direct opposition to our own more modern practice. They stand about 5 feet 3 inches on an average, are well-built and strong, move with the grace of a jaguar (I select this animal as being a native of the same woods), and are as much at home in the water as on the land. They do all the packing when the family is on the move, being capable of lifting 100 lbs. to their shoulders and moving through the forest with perfect ease."

4: Up de Graff--195-196 (1897) 1923 Jivaro
116, 291

"As for clothing, the men wear the loin cloth when out hunting or fighting or on any special festival, but seldom when in their own homes or in wet weather. The women, in addition to the loin cloth, wear a blouse in the form of a square piece of cloth with a hole cut in the centre for the head; this garment is tied round the waist with a fibre cord. The material for the clothes of both sexes is a fine cotton 'homespun,' woven by the men, composed of thread of [196] various shades dyed with fast colours produced from the leaves and barks of the vast storehouse of the woods."

"To take up the tale; we had not to wait more than an hour for the arrival of the chief, a fat, sleek, cunning-looking old thief, who greeted me as his Christian brother and produced a small piece of paper, carefully protected from the elements by a palm leaf, on which was written in ink the name 'Lazaro.' He professed to have been baptized by a Jesuit priest at Macas(where we were destined to go ourselves within a few months). The holy water certainly never penetrated his skin, for to the end of his days he was a shameless rascal, no better than the rest of his kind.

His arrival saved the situation, however, for he spoke Inca (known among the Jívaroo as 'the white man's language,' curiously enough, the reason being that it is spoken at all the points of contact between the savage tribes and the outposts of civilization). We always imagined that he owed his chieftainship to the fact that he had lived with the priests, and, later, answered the call of the wild, returning with a wider knowledge of the world than any of his fellows possessed.

He was full of interest concerning our movements. Where had we come from? What were we looking for? Where were we going? Had we any companions, and, if so, where were they? We were subjected to a brisk catechism. Well, we told him we were looking for gold, that we were going up the Santiago (known among the Indians as the Pauta), that we had a camp just below the Pongo, and, above all things, that our camp was one vast treasure-house of presents, such as those we had had the pleasure of giving to his subjects. Indeed, it was a source of great sorrow to us that, owing to the bad going in

the Pongo, we should be unable to bring them up...a pity, for they were certainly a very fine col[197]lection....No, no efforts of ours could overcome the difficulties of navigation in the cañon, with so many heavy dugouts laden with merchandise destined to enrich his people...Yes, a great pity, for we had brought them up from many moons distance expressly for this purpose, having heard of them from other and lesser peoples who trembled at their name.

Pressed to stay with him as the guests of the tribe before returning, we accepted, lamenting once more that we should be unable to give them some small recompense for their generous hospitality, as our stores were irremediably shut off by the Pongo.

After inspecting their huts, we decided that a small island which lay opposite the settlement would suit us better. It was not that their houses were vermin-ridden. On the contrary, like all naked savages who live in the tropics, they are kept far cleaner than those who have to go clothed, by their frequent immersions in the rivers and by the cleansing action of the sun and rain on their skins."

4: Up de Graff--197-198 [197] 1923 Zivaro
116, 753, 152

"While preparing our canoe to cross to our new home, Game happened to pull up his trousers to scratch a bite. His leg was a mass of old scars made by the constant scratching of sand-fly and mosquito bites during the first weeks of our expedition. Many of them had been reopened and were infected, the result being a nasty mass resembling a rash. One sight of his leg, and a general stampede set in. The whole tribe disappeared. In a moment it became clear to us that they feared the small-pox scourge.

It was with the greatest difficulty that I persuaded the chief to return to within a few yards, from which distance he could be shown that Game was not a victim of the disease; we had to make a long practical demonstration to convince him, but at last he summoned his [198] people to return and we made across to the island."

"The medicine man, the biggest Jívaro I ever saw, jumped into our canoe, having seized a paddle from a neighbouring craft. These paddles are some four feet long, of which three feet is handle and one foot blade, the latter being pear-shaped and from 14 to 15 inches broad at the centre: the action is a short, quick stroke, from 50 to 60 per minute, the blade forming a strong suction behind itself owing to the speed of the stroke. Gripped with one hand close to the water and with the other at the extremity of the handle, these paddles are tremendously powerful. They are made of a very tough, fibrous, yellow wood called by the Incas remo caspi (remo being the Spanish for an oar or paddle, and caspi the Inca for wood). The process is painfully slow, owing to the crude tools at the command of this stone, their chisels are of animal's teeth, and the only substitute for the file and the plane which is known to them is sand, with which they get a wonderful finish to their work. The Jívaros call paddles 'canalis.'

The medicine man paddled us across, then. He was the finest canoeman we ever had. He sent our dugout flying straight across the strong current in a way which the two of us together could never have equalled. His first strokes were so strong that the canoe shot away from under us and we toppled off the thwarts into the bottom."

4: Up de Graff--198-199 (1897) 1923 Jivaro
1[illegible], 574, 262

"Arrived at the island, with a dozen Jivaros to build a house, start a fire, and unship our kit, we were treated to a most efficient exhibition of camp-pitching. In an hour a fine palm shelter was constructed with a thick thatched roof and a fire was roaring outside with our few stores landed and stacked. We had supper of roast yuca, roast corn on the cob, roast plantains, with peanuts and wild honey for dessert. [199]

The last named dish must have been the ambrosia of the gods; it is delicious beyond description; the peanuts are not cooked, but dried in the sun just enough to remove the raw taste and the honey is pure white and of a fragrance finer than the finest perfume.

That meal was a feast, for we had passed through lean days, as will be remembered."

6: Up de Graff--199 (.097) 1923 Divers
116, 262

"A word as to the bananas of that country is necessary. So superior are they in taste to the varieties which reach our markets that one who has never tasted the fruit fresh from the plant can have no conception of its quality. The largest, the plantain, is about 18 inches long, and correspondingly thick; it is always eaten cooked. The plantain has, of course, great nutritive value, and is, indeed, the staff of life in the American tropics. Not only does it form the sole support of millions of human beings for months at a time, but also of their cattle and domestic animals, even down to the chickens. The smaller varieties are exquisitely flavoured; when the skin is peeled off in the raw state they give off a strong, delicious scent as does a tangerine."

4: Up de Graff--199 [2] (1897) 1923 Zivaro
116, 574

"After supper we settled down to rest. Such was the confidence which we had been able to establish in those few hours that the savages slept peacefully round the fire all night unarmed. Game and I endeavoured to do guard duty in turns, a Herculean task after so exhausting a week.

Resting, nursing our feet, eating, chatting, and waiting, we passed four days on that island. Our feet were skinning over again, helped by the freedom from the constant scrubbing to which they had been subjected."

4: Up de Graff--199-200 (1897) 1923 Jivaro-1
116, 574, 431

"Bit by bit the leaven of our carefully chosen words was seen to be working in the minds of the Indians. From time to time the chief would bring up the subject of those presents, with childish inquiries as to the size [200] of the hand-mirrors and the colours of the beads. Had we made him a direct proposition to come down-stream with us, it is very likely that his natural caution would have persuaded him that we were preparing a trap. We were in a quandary that third night of our stay with him, for the next day we should have had to go back to camp in any event, having arranged with the others to return within fifteen days at all costs if alive and free. We were debating as to whether we should openly propose to 'Lázaro' that he should accompany us with a party of canoemen, when we saw him putting off in his canoe to come over to the island.

He landed, came straight over to where we were sitting by the fire and sat down. A few minutes' talk brought him to the real purpose of his visit.

Why could not the difficulty about getting the presents through the Pongo be overcome by him going down with us with some of his expert river-men and helping us?

We jumped to our feet. What fools we had been never to think of that way out!... How brilliant an idea had occurred to him!....Why, at one blow he had solved the whole problem, and his tribe would reap the benefit of his astuteness. Most certainly! We had never thought of such a thing, but would avail ourselves of his offer. When should we start? The sooner the better, after all: on the morrow?....Right. We would waste no time.

And, although it was never sure whether we should reach the Pongo with any Antipas until we were actually under way and, what is more, out of sight of the hutments on the bank, it is a matter of history that we did. For next day, without any fuss or ceremony, we bought a sound dugout for one carisa of poison, and pushed off with eight canoemen, led by the medicine man Pitacunca en route for Borja and our friends."

4· Up de Graff--201 (1897) 1923 Jivaro
116, 177

"There is so very little known about the head-hunters of the Upper Amazon that I think a short digression on their mode of life will not be out of place. They form an interesting study in that they differ in many respects from any other known savage tribes, and are a living example of the Stone Age Man, one of the very few surviving. The inaccessibility of their country, its fine climate, and the abundance of foodstuffs, animal and vegetable, provided by the woods and rivers, all go to preserve them from the taint of civilization which, bringing disease in its track, has exterminated so many wild peoples. Almost the only literate persons who are in a position to make a record of the lives and habits of these tribes--the Jesuit priests who have established missions in the country adjoining their territory, as for example at Macas, Andoas, and Archidona--appear never to have availed themselves of the chance. They live in the gold-bearing country, and are too much occupied with exchanging blessings for the most coveted of worldly commodities."

4· Up de Graff--201-202 (1897) 1923 Jivaro
116, 177, 797

"It is worth noting in passing, that whereas those Indians (of other tribes) who have lived for fifty years under the influence of the priests at the missions I have mentioned, remain to-day in every respect as ignorant and more superstitious than ever, having acquired merely [202] the doubtful benefit of a Christian catechism which they cannot understand (and could not have been expected to), those of their brothers whose domains have been invaded by the caucheros have in the short space of some two years jumped from stone axes to Singer sewing machines, and what is more important, from sheer barbarism to self-respect. The former, as I know from personal experience, shrink from contact with strangers, under the influence of the priests' teaching (as though they feared outside intervention, which might rob them of some of their influence). The latter are deliberately taught the advantages of steel axes and machetes over stone not, be it said, by reason of the philanthropic instinct of the cauchero, but nevertheless with gain to both sides. It remains to be seen whether together with the worldly goods and broader knowledge which they have acquired, there has been left among them the scourge of disease. But at any rate their intellectual progress, and, as far as I could make out, their moral outlook have made far more rapid strides than in the case of their brothers who have fallen under the influence of 'religion.' "

4: Up de Graff--202-203 (1897) 1923 Jivaro
116, 221, 361, 241

"The Antipas, then, are semi-nomadic. The year for them is divided into three parts, not corresponding to the seasons as we know them, but to the capacity of the crops which they plant for keeping them alive; that is to say, they have three distinct homes, some ten or twenty miles apart, each with its own clearing (chacra in Inca), between which they divide their time. At each homestead they plant fresh crops before leaving for the next, living the while on the produce they find waiting for them on arrival, the result of the last sowing. Each crop takes about eight months to mature, on an average. The exception, of course, is the banana-plant, which bears fruit for many years; the old plant dies each year, after bearing one bunch of fruit, but automatically there spring [203] up round the roots fresh shoots which bear the next year.

Living as they do well to the west of the area which is annually inundated, and consequently being free from dependance on the seasons, they can sow at any time of the year, with the certainty of reaping at the end of the unvarying number of months which are needed in order that the crop may ripen. Yuca, for instance, is ready in six months; Indian corn in three months; yams (a potato which grows three to four feet in length and fifty pounds in weight) in a year; sweet potatoes, peanuts, and tobacco are also cultivated in large quantities."

"If you saw the one-handed stone axes which are the only tools these people have with which to fell the enormous trees, many of them three to five feet in diameter, to make their clearings (often five acres in extent), you would wonder how it were possible to accomplish this feat. It is a feat of patience rather than of skill. The wood is not cut, but reduced to pulp, six or eight men working round one tree at the same time.

The first step in making a chacra is to remove the undergrowth; the soft stems are cut with hard-wood machetes, what can be torn up by the roots is torn up, and the small saplings are snapped off by main force. Then the attention of the workers is turned to the larger trees. A ring is cut round the trunks of all the trees within a radius of, say, a hundred feet of some picked giant, enough to weaken them, and prepare them for the final strain which breaks them off. Finally the giant itself is attacked by a party with axes which works for days and weeks, until at last there comes a day when the great trunk has been eaten away sufficiently for it to crack and fall. But it does not fall alone, for it drags with it all the smaller trees in its vicinity which are bound to it and to one another by an unbreakable net[204]work of creepers among the upper branches. With a rending crash, a hole in the roof of the forest is made, and the sunlight pours in. At the same time the Indians pour out, leaping for their lives not only from the falling trees, but from the myriads of ants, bees, wasps, hornets, scorpions and centipedes which have been aroused. Worst of all is the iuturi (Inca), a dark red ant an inch and a half in length, which stings with its tail the moment it touches flesh, unlike any other poisonous

insect or snake in those woods; it does not wait to be disturbed but attacks of its own accord. I have even seen one make its way along the canoe rope, which was purposely passed under the water for a distance of two or three feet as a protection against crawling things. It must have been immersed for a full minute.

After leaving the trees to lie for several months during the dry season, the Antipas fire them, a process which eliminates all the smaller limbs and bush, leaving only the trunks, to deal with which they have no tools. I have examined the stumps of these fallen trees many a time; they resemble in every respect those of a clearing made by beavers."

4 Up de Graff--204-205 (1897) 1923 Jivaro-1
116, 342

"In the corners of the clearing thus made, the houses are built. The ground having been carefully 'scalped,' palms are cut down, trimmed of their tops and cut to a length of from fifteen to twenty feet. This particular wood is selected for its durability and strength. For each house six posts are prepared, the two center ones supporting the centre of the gable being some four feet longer than the rest. They are sunk firmly into the ground, at an interval of about seven feet between the centre posts and the corner posts, thus giving the house a width of fourteen feet and a length of about twenty feet. This is the average size for a family of one man and six wives. Sometimes larger houses are built, with [205] extra supports for the ridge-pole, in which two or three families live together. The framework having been completed by a number of saplings placed parallel on the three main horizontal roof supports (these saplings are technically known as perlines) and tied with green bark on rattans, the house is ready for its palm-leaf thatch. The latter is made of many layers of gigantic leaves; split down the centre of the spine and folded over double, six or eight layers bound securely together forming the regular unit of which the thatch is built, and corresponding in wooden houses to one slate or shingle. As in the modern roof, these units are placed to overlap, forming a final thickness of eight to ten inches, which not even a tropical downpour can penetrate. The framework of such houses can last indefinitely, but the roof must be renewed every eight or ten years on account of the inroads of insects; the underside is preserved from

4: Up de Graff--204-205 (1897) 1923 Jivaro-2
116 342

the latter by smoke, but the outer layers are exposed to their attacks. On entering by one of the gaps at either end which serve as doors, a somewhat bare interior is seen."

4 Up de Graff--209 (1897) 1923 Jivaro
116. 352

"The only furniture is beds and meat-racks; the inhabitants live on the floor, squatted on their heels. The beds are made of split bamboo laths supported on posts of the same wood, the whole about six feet long, of which the last two feet are left open, they are some three feet wide, and are raised about eighteen inches from the ground. Each member of the family has his or her own bed. In the open space at the bottom of each bed are placed glowing embers which keep the sleeper's feet warm."

4: Up de Graff--205 [2] (1897) 1923 Jivaro
116, 251, 263

"The meat-racks of which we have spoken are built to some four feet in height and placed over the fires, keeping the fish and meat outside the radius of the flames, and allowing it to be cured in the smoke. The Antipas have no salt."

4: Up de Graff--205-206 (1897) 1923 Jivaro
116, 352

"Hung round the house, suspended from the roof by [206] chambira cord are various bunches of bananas in different stages of ripeness, ears of corn, blow-guns, and spears. Tucked into the corners of the roof are stone implements, hand-looms, fire-making tools, and balls of cotton-yarn ready for weaving. Here and there hangs a basket made of bejuco (the local rattan, which grows in any size up to a foot in diameter) full of quivers, bamboo cases for blow-gun arrows, tubes of poison (carisas as the Incas say), partially woven cloth, paint-pots, small gourds full of fluffy cotton used on the arrows in place of feathers, and all the odds and ends of their simple household lives. In one corner a couple of monkeys and a turkey have been dropped, shot by the lord of the house, and packed to the settlement by one of his wives (no man will ever pack anything except his weapons or war and the chase; it is infra. dig.)."

4: Up de Graff--206 (1897) 1923 Jivaro
116, 252, 323

"Ranged round the walls are the 'fireplaces'--mere piles of embers without even a hole in the ground--with the grids placed over them. Each wife has her own, on which she does what cooking she is ordered to do. Piled neatly round the fireplaces are the earthenware pots of various sizes and shapes, all with cone-shaped bottoms, the largest the giamanchi containers, which are about four feet in height, with narrow necks and a maximum diameter of three feet. These gigantic vessels are fashioned without the aid of anything resembling a potter's wheel; ropes of clay are rolled in the hands, and the sides of the pot are gradually built up from the ground, the joints being filled in and rubbed smooth until the whole is as perfect in shape, as far as the eye can see, as a modern piece. After being sun-dried they are baked hard in the fire. They are never painted with any design, a practice common among primitive potters."

4: Up de Graff--206-207 (1897) 1923 Jivaro
116, 356, 462

"In general the houses are clean, free from bad odours, and kept in good repair. The work is divided very [207] unevenly between the sexes, the larger share falling to the lot of the women. They do the cooking, spinning, packing, and have the care of the plantations (weeding is one of their heaviest tasks, for they have to fight against a persistent growth of thorny and poisonous plants, which harbour all manner of venomous insects). Finally, their most important duty is the daily chewing of the yuca root for giamanchi, the standard dish of every household."

4: Up de Graff--207 (1897) 1923 Jivaro
116, 462, 286

"The men are before everything else warriors--the protectors of their womenfolk from the raids of neighbours; after that, they are the hunters; and lastly, they are the weavers. Why this last task should be by common consent allotted to them instead of to the women, remains to me a mystery. The latter do the spinning and every other kind of manual labour in the life of the tribe, and yet it is the men who not only weave their own loin-clothes, but also the material for the women's garments."

4: Up de Gráff--207-208 (1897) 1923 Jivaro
116, 283

"The spinning and weaving machinery of these people is simple yet very efficient; the cloth produced being woven with a fine thread comparable to our sewing cotton, is firm and soft, in fact very similar to our better grade cloths for men's suits, as far as the layman can tell.

For spinning they use a stick (generally hard-wood, for it needs to be heavy) about eighteen inches long by half an inch thick, slit at the end to a depth of less than an inch, the same end being also cut to a point; at the feet of the spinner lies a basketful of raw cotton. And that is all. The process is to all appearances as simple as the apparatus. Plunging the pointed end of the spinning stick into the cotton, twisting it rapidly at the same time between the fingers of the right hand, the thread is drawn away to a full arm's length, the twisting motion never ceasing; this movement produces the cotton [208] thread. The arm is then drawn in again, the stick still revolving rapidly in the fingers, but this time in the opposite direction; in this way, the thread which has been spun on the outward swing is wound on the blunt end of the stick on the return swing, giving the stick added weight, and leaving the spinner free to repeat the process and add to the ball of finished thread which has been started. Backwards and forwards flies the stick with incredible ease and rapidity, until the ball becomes so heavy that it has to be removed and stored. The women are so adept and strong that they spin even while packing heavy loads on the trail."

4: Up de Graff--208-209 (1897) 1923 Jivaro
116, 286

"To weave this thread into cloth (this being the only raw material for the purpose known to the tribe) a primitive loom is set up in the ground, composed of two pairs of sticks some two feet in length upon which the woof is wound in an unbroken length in such a way that each thread that is added to the 'wall' thus formed crosses the last in the opposite direction, then, when the height of the 'wall' is the width of the piece to be woven, the sticks are drawn from the ground and the whole thing is laid flat. The two centre sticks are now withdrawn and replaced by specially prepared weaving-staffs, polished with sand so as to slip up and down the roof without catching.

To operate the loom, one of the original outside sticks is made fast to some heavy outside object, the other tied to the weaver's waist. He then commences to pass the shuttle (a broad flat stick, on which the warp is wound)to and fro, manipulating the threads of the wool by means of the weaving-staffs, on just the same principle as modern machinery, so that the result is a firmly woven piece of cloth. He commences at the end nearest to him, gradually winding the finished cloth, and working toward the far end. To prevent disaster in the event of [209] the weaving-staffs slipping out of position, every alternate thread has been fastened securely by a loop to a small square stick which is left attached to the work until it is completed."

4: Up de Graff--209 (1897) 1923 Jivaro
116, 386

"Seldom do they dye the cloth when finished, for it is almost always woven in coloured stripes from thread already dyed. On rare occasions, however, a piece is made from natural thread and dipped afterwards, but cloth of one colour is not in vogue."

4 Up de Graff--209-210 (1897) 1923 Jivaro
116, 226, 278

"Anxious to see how the Antipas supplied themselves with fish, I once went with them (men and women) for a day's sport to a small stream a couple of miles from the settlement. While making our way along the trail, the women cut down barbasco wood (the Inca name for a vine whose sap is a deadly poison) and packed it along with them. Arrived at the water's edge, we looked for a suitable pool, exercising great care not to scare the fish away. The party divided into two sections, and each formed a barrier at one end of the pool. The men proceeded to pound the barbasco between heavy stones and throw it into the pool, where it floated about without having any apparent effect on the water. Within a minute or two the fish began floating to the surface, upside down, and swam about aimlessly in a dazed condition, easy prey for the savages who waited about (swimming and diving themselves when necessary) collecting them. We caught in half an hour at least a hundred pound weight.

This is the only method of catching fish they know, [210] except netting. Their nets are made of palm-fibre, and in place of corks and leads they use balsa wood (Spanish) and stones. The net is fixed across a rivulet, and the party makes its way by a detour to a point up-stream. There they throw stones into the water and frighten the fish into a hurried flight to where the trap awaits them. The meshes of the nets are so proportioned as to catch the fish by the gills as they rush down-stream."

"While speaking of the food supply, I will add a word or two about that deadly weapon, the blow-gun, which is the only means the *Jívaros* have of procuring meat. These 'guns' are about ten feet long, with a bore of about 1/4 inch, and an outside diameter of some two inches at the mouthpiece, tapering to 3/4 inch at the 'muzzle.' They have a killing range of two hundred feet at least, within which distance perfect accuracy is assured. Any target from the size of a squirrel upwards can be hit every time by the skilful hunter. Their absolute silence adds to their deadliness a thousandfold, for the hunter can bag a large number of monkeys or turkeys before the troop or flock discovers that death is flying through the air.

The ingenuity that the *Jívaros* display in the manufacture of these weapons with the primitive implements at their command is worthy of attention, for the finished article could not be turned out any better by a modern factory. What machinery in the world could better overcome the mechanical difficulties of producing a perfectly true 1/4 inch bore ten feet in length than do these simple people?

The wood used is the same as that employed for making spears, and it is known in Inca as chonta. In grain and colour it resembles ebony, but is much heavier and harder. It belongs to the palm family and bears good fruit. It is remarkable for its absolutely straight [211] grain and its rigidity (the qualities which make it fit for this particular use). It is so brittle that when broken it splinters into a number of long sharp needles; it is so hard that it is impervious to moisture and unaffected by heat, so that it

never warps.

The strips of the shell of the chonta are selected, cut to the right length, and smoothed to a thickness of approximately an inch by the removal of the pith, being split to a breadth of an inch and a half. Then by means of the crude tools they have--flints, stones, animals' teeth and shells--a groove is scraped in each piece 1/4 inch wide and 1/8 inch deep. It would, as a matter of fact with such primitive tools be materially impossible to cut a crooked groove in this wood, on account of its perfectly straight grain. The two strips are then placed together and bound here and there with bark; then the outer surface is split off bit by bit till it is round in form; next, by making incisions at various points and stripping off portions of the chonta, the weapon is tapered so as to comply with the dimensions given above. Now the process of binding commences. The 'gun' is tightly wound with green bark tapes (about half an inch in width) from end to end. On this binding is melted black bees' wax ( taken from an insect which builds its hive in the ground, and produces a honey which is used for medicinal purposes ) which is smoothed over with hot stones and forced into the cracks so as to perfect the surface; next, another layer of bark tapes, slightly thinner, is bound on, and more bees' wax (a heavier coat this time) is applied; the final step in the finishing of the exterior is a second treatment with hot stones, which produces a hard, even surface. Then the completed weapon is a perfectly straight, round, tapered black tube.

Next the bore is trued and polished by means of a cord with a rag tied to its centre

and stretched between two [212] trees. The tube, having been slung on this cord, is run backwards and forwards for weeks, while sand and water are fed into one end; toward the end of this laborious but efficient process, finer sand is used. At the end, the bore has a surface equal to that of the barrel of a shot-gun. Finally, to the butt end of the gun is fitted the mouthpiece, a carefully scraped funnel of hard-wood fashioned to fit the mouth exactly, so as to admit of no air escaping and robbing the weapon of its power. This piece is made to fit over the end of the tube to which it is bound, and waxed by the same process as I have described above."

4: Up de Graff--212-213 (1897) 1923 Jivaro-1
116, 411

"The arrows are always treated with jambi (poison--Inca). The particular kind which is used, the product of boiling the bark of a vine, has a swift and painless effect on all the animals and birds of the forest, as far as I know, except the jaguar. (I once tried one of the latter, and filled him so full of arrows that he looked like a porcupine, without any apparent effect except that of angering him.) The arrows are made from a bamboo having a triangular cross-section, and of the same size at the joints, which the other canes and bamboos are not. From this species can be cut an absolutely straight missle, which would be impossible in the case of the others, in which each section between the joints is, however slightly, concave. By splitting and scraping, an arrow some twelve inches long and one-sixteenth at its greatest diameter, is made. One end is sharpened to a point one inch long, from the base of which the whole arrow is tapered toward the rear to a point equally fine, in order to give it a perfect balance in flight. The head is dipped in the jambi and dried in the sun or before the fire. The base of the head is ringed by means of an instrument which is always carried attached to the quiver (a section of bamboo); this consists of the lower jaw of the paña (the barking fish--[213] Inca) which is fitted with razor-edged teeth. A tuft of cotton is twisted round the shaft about three inches from the tail, which serves the double purpose of the feather of an ordinary arrow and the wad between the powder and shot of a cartridge. Forced out by the air behind the cotton tuft, the missle leaves the 'muzzle' so rapidly that it is invisible to anyone looking across its path (though of course visible from behind). The

trajectory for the first fifty yards is remarkably flat for the class of weapon, and will penetrate a pine board half an inch at fifteen yards' range. I have hunted with these guns a great deal and can bear witness to their deadly efficiency."

4: Up de Graff--213-214 (1897) 1923 Jivaro-1
116, 224, 278

"The big monkeys are the hardest game to bring down with shot-gun or rifle. I have shot them to pieces with a Winchester, until their entrails actually fell to the ground, before they have fallen. Even when dead, very frequently they remain suspended by the tail, and the tree has to be climbed before they can be recovered. But the poisoned dart from a blow-gun, as long as the skin is broken at any point, kills them within two minutes. Experiments which I have carried out on domestic animals have proved, moreover, that the poison (of which I brought home a small quantity) acts painlessly, the effect being much the same as an overdose of morphine. This fact leads me to believe that a drug could be manufactured from the same vegetable which would be invaluable in medicine. A trial was once made in the Guianas by an English naturalist with the same drug (under the local Indian name of huareli) on a bullock, which died in twenty minutes as a result of three arrow wounds. The vine from which it is made grows in great profusion throughout the Upper Amazon zone, and the process is simple in the extreme. It is cut into sections a foot in length, and the thin hard outer crust of bark is carefully removed by [214] scraping. The main bark, white when first exposed to the air, turns brown in just the same way as an apple. This inner bark is scraped into fine shavings by means of shells and flints, and these are placed in a colander which rests upon a pot in which water is boiling. The water is poured over the contents of the colander repeatedly, until the constant action on it has drawn out the alkaloid, when the lifeless shavings are thrown away and the residue is boiled down until it resembles, both in

consistency, colour, and smell,plain chocolate. While still warm, it is poured into the bamboo receptacle previously described and when cool, it becomes semi-solidified.

Of course there is a great deal of superstition among the Jívaros in connection with the manufacture of this poison. The medicine man alone can make the pots which are used to boil it, and he is furthermore the only person who is privileged to make the poison itself. He collects the stings from various species of noxious insects. Spiders' teeth are also greatly favoured; both these ingredients are introduced into the pot with due ceremony and unlimited confidence in their deadliness. If water can be obtained from the spot where a rainbow touches the earth, then indeed the brew will be immeasurably potent! But be that as it may, the poison which we bartered to the Antipas had not been tempered with any strange charm, as we who made it know, and yet it is declared by them to be the best they had ever used.

There is really a certain amount of risk and danger connected with its manufacture, insomuch as the fumes given off by the boiling liquid are pungent and noxious. I believe that they would prove fatal if inhaled in sufficient quantities; which supposition lends credence to the stories of the Indians that many a medicine man has been found dead over the pot."

4: Up de Graff--215 (1897) 1923 Jivaro
116, 278, 721

"Despite its proved deadliness, this poison is never used by the head-hunters in warfare. (I say 'deadliness' with some justification, for it compares very favorably with, say, the poisonous snakes of India, whose bites take more hours to bring on death than the jambi does minutes.) Why, I cannot explain, unless it be that a man can snatch an arrow from a wound so quickly that the poison would never have time to be absorbed by his system, as it clings to the arrow-head in a gelatinous form. While speaking of this poison and its effect on men, I recall an incident that happened on the Yasuní when Jack Rouse and I were existing through those ghastly eighteen months. An open wound that had become fly-blown and full of worms (there was nothing in the nature of a fresh cut about it) had to be cured somehow, and every remedy we could think of had failed. The case was one of desperate urgency, and Jack declared that 'he would rather be poisoned than eaten alive by worms.' So it was decided that I should fill the wound with this same jambi, and I applied about a thimbleful, or enough to kill an ox. Neither Jack nor the worms took the slightest notice. Now it may be that his life was saved by the fact that there was no fresh blood flowing, or again that the poison, for some strange reason, has no effect on men, which latter supposition would account for its never being used in battle. I may add that the worms were summarily ejected in the space of half a minute by the application of a wad of cotton soaked in nicotine procured by condensing cigarette smoke on the finger-nails. (The juice of the same cigarettes when boiled has no value whatever)."

4: Up de Graff--215-216 (1897) 1923 Jivaro
116, 262

"It is a self-evident fact that the fish and meat on which the Antipas live so largely is nearly all poisoned, for we have noted already that the blow-gun is the only weapon of the chase, and that they kill their fish more often than [216] not with barbasco. Curiously enough, as is often the case with poisons, not only is the flesh of the fish, which has not been hypodermically infected, good to eat, but even that of the animal which has."

4: Up de Graff--216 (1897) 1923 Jivaro
116, 762, 278

"It is this same barbasco juice [KS: poison used for fishing] which the Jívaro women drink to commit suicide."

4: Up de Graff--216-217 (1897) 1923 Jivaro-1
116, 776

"The religion of the Antipas, as far as I was able to discover, is simple and primitive. They fear two gods: the god of rivers and rain, and the god of the forest, the former called by the Incas Yacu mámam (the Odd-footed One), the latter Chulla Chaquicuna (the Great One of The Waters).

The true Inca religion is of course sun-worship, but those descendants of the old kingdom who still retain the mother-tongue, but who have strayed from the mountains into the woods of the Amazon basin have, in the course of generations, adapted themselves to their new environments, and dropped the worship of the god they scarcely see, adopting those of the Jívaros in their stead to whom they must look for prosperity. The rivers, the rain and the forest give them all they possess, while the sun plays but a small part in their lives. To the worship of the two Jívaro gods they have added a lively appreciation of the existence of the Evil One, in the person of Supai, at whose door they lay every misfortune that overtakes them.

I have digressed for a moment on the subject of the religion of the Incas rather in order to compare it with that of their neighbours, the Jívaros, of whom we are speaking, than to examine it in detail. To return, then, to the latter; Chulla-Chaquicuna is Lord of the Forest, and moves through it unseen by any, in the form of a man with one human and one jaguar's foot. The Indians point out his tracks, as indeed they have done to me many a time. The obvious explanation of their ex[217]istence (for they do indeed exist!) seems never to have occurred to their simple minds. When he has been found to have

passed their way they attribute anything out of the ordinary (abundance or scarcity of game, an unsuccessful brew of poison, or the presence of dangerous snakes, for example) to his influence.

Yacu-mámam possesses the power of changing from a tapir to an anaconda, from an anaconda to a frog. His haunts are the rivers and streams, and he brings on destructive floods or beneficial showers as he wills. Thus these three animals are never molested by the Jívaros, for fear of the anger of Yacu-mámam. This fact accounts for the tameness of the tapir throughout the region of which we speak.

As far as I know no sacrifices are ever offered to these gods. They are regarded from a respectful distance, rather than cultivated with complicated ceremony. Images and religious festivals are unknown to the Jívaro. His is the religion of a simple, practical forest-folk, based on superstition, which is, after all, common to all primitive peoples."

4: Up de Graff--217-218 (1897) 1923 Jivaro
116, 396

"Canoe-making is an art which must have been passed down among the Jívaros for many centuries, and with little or no advancement in method, for to-day the process is so primitive as to be almost certainly the same as that employed by the original inventors. With infinite patience, a large semi-hard-wood tree three to four feet in diameter is cut down. (I give it no name, as several varieties may be used.) A clearing is made in the vicinity of the fallen trunk to allow the work to be done. The top of the tree is then burned off, until a rough log some twenty to thirty feet long in the case of the biggest canoes, is left. Then, over a period of several months, the arduous task of removing the bark and sap, and of fashioning the log, inside and out, to the shape [218] of a dugout is carried out. With fire and stone axe, little by little the tough wood is charred and chipped. Over and over again the same process is repeated; the women stand fanning the flames, the men work on the blackened surface with their slow tools. Not more than a couple of inches can be burnt at a time, when the charcoal must be scraped away, and a fresh fire built. And so the log gradually takes on the shape of a canoe, and the first rough process draws to a close. As the last of the fires are doing their work, wedges are driven in between the sides of the craft to give them the outward slant which is noticeable in the finished dugout. The fire also serves to drive out any insects which may have made their way into the wood. Then comes the still longer process of scraping and polishing with stones and sand, until the surface of the canoe, inside and outside, is free from imperfections."

4: Up de Graff --218 (1897) 1923 Jivaro
116, 412, 437, 177

"We had with us many cases of machetes and steel axes, which we bartered from time to time. It may be, then, that the next time I visit them, to get them to work the 'placer' deposits of gold which lie hidden somewhere in their territory I shall find that a great change has been wrought in their lives by the advent of these tools. For of all the blessings of civilization which these people needed, the axe and the machete to combat the prolific growth of weeds and bush in their clearings, and to make for themselves the multitudinous necessities of life--for almost every thing they use is cut from numi (wood--Jívaro) --stand out first and foremost."

4: Up de Graff--218-220 (1897) 1923 Jivaro -1
116, 512

"During our sojourn among the Antipas in their homes, I had many an opportunity of studying their every-day lives. You walk into a hut and a typically domestic scene presents itself. The women are seated on their heels about a great earthenware jar of freshly boiled [219] mama (arrowroot--Jívaro). Some are half-clothed, some not clothed at all. Those who have lost their husbands in war must pick up what cloth they can, the cast-offs of their luckier neighbours whose menfolk still live to weave for them. A monkey or two is pottering about, chewing bananas, and even a tame paujil is perched on a cross-beam, uttering its peculiar call. A woman stretches out her hand and selects a piece of yuca from the pot. She puts it in her mouth and chews it to a pulp resembling mashed potatoes; satisfied that it has reached the desired state, she deposits it on the ever-growing pile of the same pulp, which stands within reach of all on banana leaves. This is the giamanchi, the staff of life. (Preserved with the human saliva, it will last for six months if stored in crocks and buried in the ground against contact with light or air. When the time comes for it to be consumed, or in other words, when the proper amount of fermentation has taken place, it is mixed with water in a gourd until it looks and tastes like buttermilk. The whole idea is to our modern minds repulsive, but my own experiments have proved that there is no other way (in the woods) of preserving arrowroot. It is a highly sustaining starchy tuber, containing 80 per cent. starch as against the potato's 20 per cent. Cooked when fresh, it is light and fluffy--a delicious vegetable

dish.

One or two of the women are carrying babies slung in a small cloth hammock on the back. One of them is nursing a baby which cannot be less than three years old. (This is a common custom, which appears to us both strange and undesirable. The Antipa women do not wean their infants until they are grown to the kindergarten stage as we know it. They even pack them long after they can walk, run and swim. Thus the step from babyhood to marriage is only a matter of seven or eight years. [220]

Another woman is nursing her baby when she remembers the young monkey curled up on her head. It too she treats as her own offspring, and suckles it with the same care as she does her son. (This is common among the Indians of the Amazon, be they semi-civilized or savage.)

Six or eight fires are smouldering round the walls, one for each wife. On a meat-rack steaks from a freshly killed huangana (wild hog--Inca) are being cured, and their smell fills the house."

4: Up de Graff--220-221 (1897) 1923 Jivaro-1

116, 512

"Leaving the women to their daily task of chewing, after having accepted the giamanchi proffered by one, we pass outside to where a group of bucks are engaged in wild conversation. They are, to all appearances, imitating the action of a trombone player. Their right hands fly to and fro from their mouths to the full extent of their arms, palms inwards. Their tones are loud and deep, and the light in their dark eyes betrays their emotion. They are talking of war; this we know, for only then do they indulge in these gestures and forced tones.

Nearby in the forest rises the smoke of many fires, and the thudding of the axes is heard as the party works on a new dugout. Over there comes a string of women heavily laden with yuca, bananas, and faggots cut from the chacra. Entering another house, we find a man at work on a blow-gun, with a pot of boiling beeswax at his elbow, his hair wound round his neck to keep it from the fire. A boy of some ten years is eagerly helping his father to complete the weapon which is to be his. Soon he will be off into the woods after humming-birds, which will give him plenty of chances to perfect his aim before his lungs are strong enough to allow him to take his place amont the hunters of his tribe, with real poisoned arrows. Grouped at the door under the shade [221] of a pántam (banana plant--Jívaro) are half a dozen women making baskets. They manipulate the split rattans with ease and dexterity, weaving intricate patterns, and producing baskets of great strength. They are made in pairs, one set slightly smaller than

the other; the larger is then lined with a specially tough palm-leaf and the smaller is placed inside it. The two are then sewn together round the top, and a cover, composed of another pair of baskets is hinged to the first. The result is a durable, rainproof receptacle, which is used for packing anything and everything, or for storing household goods; those which are destined for packing only are made three feet high and two feet broad. I learned the art of making them myself on the Yasuní, and the knowledge stood me in good stead."

4: Up de Graff--221 (1897) 1923 Jivaro
116, 164, 757

"All the men and women we meet are strong and healthy, for although once in the hands of the medicine man thay have but a poor chance of recovery (he generally starves his patients to death), they have little need of his services, being absolutely free from diseases, except smallpox and one other of which the chief symptom is a cough, but which I was never able to identify."

4: Up de Graff--221-222 (1897) 1923 Jivaro
116, 757

"I am reminded of an incident which took place when I was with the Antipas. One morning, there was brought to me a warrior who had been wounded by a Huambisa with a shot-gun loaded with powder and pebbles and fired at short range (surely part of the booty of the Barranca raid). The bone in the upper arm was shattered, the limb dangling useless. The man was so emaciated that he could hardly stand, and the wound was septic. I syringed him with bi-chloride of mercury and dressed his wound for him. On enquiring as to the diet on which he had been put by the medicine man, I found that he was forbidden to eat anything but green bananas! [222] However, persuaded by the rapid progress that he made under my care, the local oracle gave in, and the man was permitted to take proper nourishment. He recovered completely as I found on my return from the Santiago."

4: Up de Graff--222-223 (1897) 1923 Jivaro-1
116, 511, 181, 619

"Contentment reigns supreme. Men and women seem happy in their lot. They have an abundance of every necessity and luxury they know. Their one worry in life is the constant fear of attack by raiders, but this they forget as easily as children do the dangers of the street. Light is the daily round of all, and above all others of him who has a daughter to give in marriage! He who aspires to her hand becomes to all intents and purposes the slave of his future father-in-law for a term of five or six months until he proves his worth. The young savage takes over the scouting, hunting and fishing duties of the house into which he is going to marry; he is at the beck and call of its head, and must answer every call like a fag at school. But only once does he go through the mill; his own household set up, he takes to himself as many wives as he can find among his own people or steal from his enemies; thus it comes about that there is many a woman among the four Jívaro tribes who has been stolen and re-stolen until she is as much at home on the Santiago as on the Marañon, as happy burning hair off monkeys for an Aguaruna as spinning cotton for a Pautecuma. Indeed to my mind there can be one explanation of the existence of identical languages, habits, clothes, modes of fishing and hunting, and applied arts among all the Jívaro peoples, namely that they spring from a common ancestral tribe. A family would break away from the common hunting grounds, move off and establish itself on another river, and nurse its hatred of the parent group until, joined by others, little by little it became the nucleus of another tribe. And so through the course of [223] time they have drifted so far apart that to-day no one tribe

4: Up de Graff--222-223 (1897) 1923 Jivaro-2
116, 511, 181, 619

is found with their headquarters within thirty days' canoeing of another, and a deadly hostility exists between them all. There are white men alive to-day in the States who have been scalped by North American Indians; but after the Jívaro has taken his war-trophy, 'finita la commedia.' "

4: Up de Graff--224-225 (1897) 1923 Jivaro
116, 152

"The Jívaros are credited by those who have never come into personal contact with them, with many a virtue of which they are entirely innocent. Contrary to what is generally supposed, these untamed sons of the forest are a compendium of all that is cunning, knavish, and diabolical; they have the courage of wild animals in battle, [225] but unlike the latter, their guiding principle is 'every man for himself.' The truth is not in them. Their attempts at understanding the psychology of the white man are even more puerile than were those of the Germans in the Great War. A totally unenlightened race, they must be controlled by fear and superstition."

4: Up de Graff--226-227 (1897) 1923 Jivaro-1
116, 224

"The anungatas (steersmen--Jívaro) made for the shore. We landed, all of us except Game and Noagra, who stood guard over the canoes. Game was a little chary of venturing barefoot into the woods, after what he had gone through on our passage upstream. Then started an exhibition of rifle versus blow-gun, in which the latter came out with flying colours. The type of monkey which we were after, the coto (the howling monkey--Inca), weighs about thirty pounds, and is like the ostrich, in that it hides its eyes in the conviction that it is itself concealed from its enemies. Hanging by its hands, feet and tail from the underside of one of the big limbs, it remains immobile, and even the crack of a rifle does not scare it into flight. This animal is the evening and morning 'songster' of the Amazon woods. At sunrise and sunset, each troupe parades in single file about the branches of the tree which is their temporary home, uttering a deep growling call which can be heard for miles. The first time I heard it, a monkey was the last thing which occurred to me; it seemed that all the tigres on the Amazon were engaged in a death-struggle. Breaking through the silence of dawn, the loneliest hour of the twenty-four, it drowns the squawk of the waking parrots, and sets the woods reverberating. The coto has ten fingers and as many toes, and its tail, two and a half inches in diameter at the thickest part, is tremendously powerful. When shot, he first lets go his hand-grip, and then his feet loosen [227] their hold; last of all his tail slips gradually from the branch to which it is tied, and down he crashes. Sometimes he dies where he hangs, his tail coiled about the limb in a grip which tightens more and more as

his body grows cold. That was when Ungucha had a chance of showing his skill as a climber. Up the strands of bejuco he went, hand over hand, a hundred feet and more, until he was among the topmost limbs of a big tree where he swung from branch to branch until he reached his prey, which came crashing to earth a moment later."

4: Up de Graff--227-228 (1897) 1923 Jivaro
116, 825

"The Jívaros tell how it came about that the coto has an enormously oversized larynx. One day the maquisapa and he met each other in the woods. The coto was showing the other how to break cocoanuts by pounding them together, but his long-legged cousin, when he tried to imitate him, caught his thumbs between the nuts and lopped them off. Determined to revenge their loss, when next he met his bearded friend, he persuaded him by means of slight-of-hand that it was unnecessary to crack them at all, and that they tasted much better when swallowed whole. The credulous coto followed his [228] advice, but the cocoanut stuck in his throat, and left its mark on all his progeny to this day, while the children of the maquisapa must go for all time without their thumbs, although they still retain their ten toes."

4: Up de Graff--228-229 (1897) 1923 Jivaro-1
116, 252, 262

"That afternoon we dropped some two dozen cotos, only three of which fell to my rifle. The condition of these three caused the Jívaros furiously to think, for they were shot to pieces, and were indeed an ugly mess. We packed them back to the bank, tied by their tails in bunches of four, and carried slung over the head. The game was dipped in the river to moisten their hair. A brushwood fire was built to singe them as they hung by their tails from a pole, which stretched the whole length of the blaze. As the muscles contracted with the heat, a gruesome spectacle presented itself, for their limbs moved, they clenched their hands, and their faces were distorted with an ugly grin which exposed their regular teeth. When singed all over, they were taken from the fire and scraped with machetes. There is only one word to describe the portions of meat which were hacked off--hunks. Regardless of joints or bones, they were chopped up by the savages, who had never known any better instrument than the stone-axe; the pieces were thrown into the boiling-pots, still half-covered with burnt hair which the hasty scraping had missed. For twenty minutes they cooked, emitting an unspeakable odour which was as welcome to the Antipas as that of breakfast bacon to the hungry white hunter.

I have omitted to mention what is always the tid-bit of such feasts. Before the singeing and cooking of the animals begin, they must of course be cleaned. (When meat is scarce, nothing is thrown away but the bones; even the guts are scraped and toasted.) The contents of the stomach are extracted and mixed like giamanchi, with water. Then without any further ado [229] they are drunk. At first the very idea is repulsive, but

after all, the monkey lives on fresh wild fruits and his inside is a [sic] clean as ours. He has merely started the process of peptonization and digestion for us, which saves us trouble. I was expecting, when first I tasted this delicacy, to find a trace of bitter gastric juices, but was pleasantly surprised; only the pure flavour of the fruit-pulp was there, and it made an excellent drink."

4: Up de Graff--229 (1897) 1923 Jivaro
116, 262

"The Jívaros, as I have said, throw nothing away but the bones, and even these they break with their teeth to get at the marrow. Although I have found many of their dishes excellent eating, I must say that soup cooked without salt, more especially when it is strongly flavoured with burnt hair, is not palatable. Indeed, in order to allay our hunger Game and I selected a young coto from the bag, skinned it and roasted it on the embers. Prepared in this way, they are just as good eating as any other game I have tasted except their cousin the maquisapa, whose equal, in my estimation, cannot be found on any table."

4: Up de Graff--230-231 (1897) 1923 Jivaro -1
116, 609, 576

"Pitacunca, [KS: medicine man and navigator] having landed, shot one glance at the camp and its inhabitants, and turned on his heel. Followed by the rest of the savages, he walked to a spot some twenty yards away, sat down with his back to all of us, and set up a dismal wailing chant in a minor key. His every action was imitated by the others, who joined in the chorus, and sent that dirge floating across the Marañon. Never a word had any of them spoken since they had caught sight of our outfit. They seemed to be stunned [231] by the sight of so many apaches (white people) and so much kit, as if the folly of having entrusted themselves to these unknown white creatures was suddenly brought home to them. No other reason occurs to me for so much yowling. It seemed as if they would never stop and we did not care to interrupt them, until finally Jack, whose first introduction to the Antipas cannot be said to have been inducive to a happy understanding, enquired in plain English whether they didn't see their way to changing the tune. The tune never was changed, but at the end of half an hour or so it died a natural death.

Little by little the Jívaros drifted over and seated themselves by the camp fire. Finally Jack and Ed. roused them from the trance into which they had fallen, the former doing a double-shuffle in the bottom of the Exploradora to the accompaniment of the latter's banjo. The savages were greatly inpressed, both by the unrivalled quality of the music and the dancer's skill! To complete their recovery, we presented them with the most glaring specimens of the shirts we carried for barter--they were striped

4: Up de Graff--230-231 (1897) 1923 Rivers-I
116, 609, 576

indiscriminately with orange, black, red, yellow and green, and were known among us as 'Hallelujahs.' "

4: Up de Graff--232 (1897) 1923 Jivaro
116, 262

"One day, driven mad by the screaming of the macaws which had come to feed in the palms near camp, I suggested to the medicine man that we should go out and bag a few. The expedition was successful and we brought a few back. I noticed that the first thing the Jívaros did was to extract the contents of the crop, pure fruit-pulp, and eat it, giving it the first place among the delicacies which the bird had to offer. I cannot lay too much stress on the excellence of this dainty morsel. The palm-fruits on which they live are exceedingly hard, and contain a number of seeds or kernels embedded in the meat, making it more trouble than it is worth, despite the attractiveness of the meat itself, to eat the fruit. But all the spade-work is done by the parrot, whose sharp beak and dry tongue separate and reject the seeds, with no deleterious effect on the fruit itself. Once more we have an example of the possibility of taking advantage of the digestive efforts of a wild creature and finishing the feast."

4: Up de Graff--232-234 (1897) 1923 Jivaro-1
116, 224, 251

"Finding plenty of hog-tracks in the vicinity, we de[233]cided to hunt them down and cure their meat against the day when we should be setting off up-stream once more. The meat of these hogs or peccariesi seems to preserve its flavour, despite the daily smoking to which it must be subjected to protect it from insects, better than any other meat to be found in the forest. Of this game there are two species, the huangana and the sajina (both Inca); the former is more the shape of a domestic pig than anything else, is black, and weighs about a hundred pounds; it carries a musk-sack on the middle of the back, the use of which is somewhat obscure to me; perhaps it may be a form of protection against insects; anyway, a man can track them through the woods by scent as easily as a hound follows a hare, so powerful is the smell they leave behind them on every object against which they rub. It is armed with a pair of fine tusks set in the lower jaw, which it uses both to dig up roots, and to rip the entrails out of its antagonists, the jaguars. The latter are afraid of them, but occasionally follow a herd in the hopes of being able to grab a young hog and make off with it. Not always do they succeed, and when caught their fate is sealed. They are torn to pieces by the infuriated beasts and devoured, head, tail, skin and feet. The huangana will eat snakes, lizards, and anything else that he can find. The herd can be smelt a full mile away if the wind is set right, and long before one is found it will be heard rooting and snuffling in the ground, cracking nuts, one animal fighting another for the tidbits which the monkeys have dropped. The herd often numbers two hundred or more and will attack on sight. To approach

these beasts is easy, for they are too busily occupied in searching for food; their sight and scent are not highly developed, no doubt because they have never had to fear anything that walks in the woods. If you are stalking these animals you will be wise to select [234]your tree before you cover the last fifty yards (and see that the tree contains no ants' nor hornets' nests!) When the nearest huangana sees you, he will utter his war-cry--an ominous rattling of his tusks--which is taken up by the whole herd. A noise is produced which is at the same time fearful and wonderful. It is like a thousand pairs of castanets. It echoes and re-echoes round the woods until it seems to come from every tree. With what terrific speed the lower jaws of this animal must vibrate to give out such a volume of sound may well be imagined.

Select your tree, then, and stand ready to jump as soon as you have fired your shots. The herd will start milling round looking for something to charge, until it sees your smoke, or a movement of your body. Then jump! And may the branch bear your weight, or you will shoot no more huanganas!

The herd, usually sweeps on under the tree and leaves the hunter to descend in peace, pick up the kill, and make his way back to camp. In any event you will be left in peace, if you are not located by sight or scent, for the hogs will go tearing off in one great avalanche, charging some imaginary enemy, and will not pull up until they have covered four or five miles and feel like settling down to continue their feed."

4: Up de Graff--234-235 (1897) 1923 Jivaro
116, 224

"The second species, the sajina or collared peccary, is [235] somewhat smaller and, though fierce enough when disturbed, is not so formidable as its cousin. Briefly it can be described as closely resembling the wild boar of Europe--thinnish wiry hindquarters, heavy shoulders, and short thickset forelegs, a lean flat barrel, bushy hair on shoulders and neck, long fierce tusks, and patches of white to relieve the dead black all over the body. It hunts in pairs, or very small groups of a few pairs.

I once had occasion to prove the temper of the sajina. Having strayed from camp a little way without my rifle (a risky thing to do, I must admit) I came across a couple rooting for food in the bush. They came out into the open to within twenty yards of where I was working with an axe, regardless of the noise and flying chips.

They would perhaps have left me alone, had I not thrown a stick to frighten them off. The challenge was accepted, however, and one of the beasts came on with such an ugly snort that I turned monkey at once and took to the upper branches. After one look into those wicked little eyes, I felt that a well-covered retirement was distinctly indicated. An axe has its uses. It is all very well for chopping trees, for if you miss your swing, the tree won't bite your leg off. For carving pork on the hoof I prefer an instrument with a longer reach."

4: Up de Graff--238-240 (1897) 1923 Jivaro-1
116, 427, 484

"On the sand-spit at the junction of the Santiago and the Marañon lay some two hundred Antipa canoes, heavily laden with fruit, vegetables, honey and giamanchi in enormous quantities. They were drawn up in a great uneven fringe for a distance of a full quarter of a mile all around the edge of the tongue which juts out between the two rivers, and scattered all over the miniature peninsular were hundreds of savages, men, women, and children--three or four to every canoe--squatting in groups of families, some gossiping, some cooking, others speaking excitedly of war, others polishing their spears with sand, and yet others already partaking of their evening meal. The slanting rays of the sun tinted the whole scene with a purplish light, and threw into restful harmony the naturally crude colouring of forest, river, sand and savage. No cloud obscured the deep blue dome of the evening sky. The three long wailing notes of the yungaruru floated across the water, and the screams of the first flock of parrots rose high above the hum of human chatter as they skimmed over the trees on their return home from the days' foraging.

As we toiled up the stretch of bad water that lies between the gate of the cañon and the junction of the rivers, the scene gradually unfolded itself before our astonished eyes. What a change was this from the deadly [239] emptiness of the landscape when Game and I first paddled by the long desolate first reach of the Santiago, straining our eyes for the sight of any living thing!

To say we were taken by surprise is to understate the case. We were amazed at the

rapidity with which the fame of our expedition had spread amongst the savages. Apparently a good proportion of the whole tribe of Antipas had ventured well outside the radius of their home territory--a rare display of boldness--in search of those confounded presents of ours. There they were, sitting patiently waiting for hand-mirrors and striped shirts, with tons of fruit, vegetables, and other products of the rivers and woods. The full capacity of our fleet of four canoes was five tons at the most, and we were already heavily laden. Despite this, we found it wholly impossible to convince these adventurous merchants of the impracticability of their suggestion that we should take possession of all they had to offer in exchange for the coveted trade-goods. That evening we spent weary hours in trying to drive this obvious truth home to them, without any success attending our efforts. We transacted what business we must, and when we had bought more peanuts and honey than we could possibly want, we decided to sleep on the matter.

Next morning we were forced with the necessity of getting rid of that great concourse of Jívaros and, more important, seeing them go off in a contented frame of mind. We decided eventually to go the round of the whole beach, and present the crew of each canoe--generally a man with a couple of women and a child or two--with something to keep them quiet. I may mention that we had made the whole party leave the tip of the tongue of sand to us, where we pitched our little linen tent in a strategic position; on three sides water, which nothing could cross alive unless we wished it so, [240] and on the fourth

the flat open sand-bar with no protection whatever for lurking bodies.

The plan which we adopted was successful up to a point; the savages were certainly well satisfied to receive their presents, and to obtain a close view of the far-famed apaches, whost arrival had caused such a stir in the country; but all the good which had been done was threatened with instant reverse by our refusal to 'trade in' their tons of supplies for which we had no use nor space for carrying along in our four dugouts; so acceptance was the only possible course to follow. The beach became littered with the finest produce of the country."

4: Up de Graff--240-241 (1897) 1923 Jivaro-1
116, 484, 427

"Then came the stiffer problem, the ultimate object of all our manoeuvering up to this time, viz., to organize a fleet of canoes and canoemen not only to move our cargo and outfit up the Santiago but to accompany us as a guard against attack and as a war party in any possible conflict with the Huambizas. These Antipas were bitter enemies of the Huambizas and therefore we figured they would admirably suit our purpose. For many days we had been working up to this climax, endeavouring to convince old Pitacunca that it would be worth his while to give us thirty days' paddling in exchange for his choice of an axe or machete, with the same terms for every one of his men. No other bait had been tempting enough, as we had known only too well would be the case. Bit by bit we had led them on, until at last we had made our final offer, and before their bulging eyes we opened a box of axes and a case of machetes. The sight of the glistening steel and the bright red paint on the handles struck home to their very souls (if they had any), and I could see that they decided then and there to possess themselves of these treasures by fair means or foul. They knew, and we knew, that they had no [241] intention whatever of fulfilling their contract, despite the solemnity with which the terms were propounded and agreed to. Jack remarked at the time, I remember, that it was a moot point as to which party thought the other bigger fools. But we had our own ideas as to the enforcing of the contract. There was no doubt about it that if we wished to retain the services of the Indians we should have to be eternally vigilant and diplomatic. By day they could never give us the slip, clearly, armed as we were with Winchesters. The canoemen

would be divided between the several craft and escape would be out of the question. By night we should chain the canoes together, and always keep a guard mounted. By land they would never dare to face the risks of encountering a Huambiza war party. And so it turned out, with the exception that we allowed Pitacunca to take the Exploradora with three other Antipas, keeping them always within rifle-shot; in any event, they would not cut and run without their comrades and even if they did they could never paddle so heavy a craft away from us who manned the light twenty-four footers. In short, they were a slippery crew to deal with, and we couldn't be too careful."

4: Up de Graff--241-243 (1897) 1923 Jivaro-1
110, 484, 427, 152

"Meanwhile, the bulk of the gathering of Antipas had melted away, leaving only the wise minority, who saw something in the shape of a big haul coming when we turned the bows of our dugouts up the Santiago. Clearly we should leave behind us nine-tenths of our purchases, and the harvest would be rich for those who were there to gather it. (Old 'Pete' had probably warned them to be ready at midnight on our first night out.) Perhaps the bulk of the remainder watched us from the seclusion of the woods as we pushed off, as they hoped, in all innocence.

'Sept. 29th. Having finally satisfied the Antipas, by [242] means of our presents, that we are friendly disposed toward them, and closed the deal with the crew by handing them out their cases, we are due to start at mid-day to-day. 'Pete' and his men are obviously well satisfied with the business they have done. It is quite clear that they contemplate leaving us to-night with much relish.'

About five o'clock that evening we sighted a sand-bar for the first time since entering the Santiago...

That night it fell to Pedro to mount guard from sun-down till midnight. Long ago we had given our time-pieces away to the Antipas up the Maranon, for they were useless impediments. By the time each man of us had jumped overboard half a dozen times to save a paddle, a war-bag, or Ambusha, they were not much use except as presents. In the last-named capacity they were handed out to 'Lázaro,' Pitecunca, and one or two other important gentlemen. The original recipients kept the cases, which they hung

around their necks, and distributed the wheels to their less favoured fellows.

During that watch of his Pedro had no peace. Every few minutes the siege would be renewed. With smiling faces our friends would beg for a canoe to cross the river for one of a hundred purposes, urging reasons which were apparently so pressing as not to allow of even waiting till dawn. They had heard a troupe of night monkeys on the other bank; they had spotted a fine log for the fire five hundred yards down-stream (always down-stream!); they thought it would be a good idea to have some fish for breakfast; they were sure that the turtles would be out on the other end of the sand-spit, and they could approach noiselessly in a canoe...[243] and so on, until Pedro called me up in despair. I kept them quiet with a long story about the dangers of going off alone in the dark, with the possibility of a Huambiza surprise at any moment. I treated them in the only way possible, like children, meeting them on their own ground. Neither I nor Pitacunca believed our own words, much less those of the other. But the game of bluff had to be played out, like any other game, and the hardest bluffer won. So passed the first of a series of such nights, always the same farce had to be staged; endless machinations met by endless argument. At length, after four or five nights had passed in this fashion without any success being attained, it dawned on the Indians that other tactics must be adopted if they were (in the language of sport) to make a get-away. They began to fall sick, and with remarkable ingenuity discovered that the waters of the Santiago brought on all manner of ills, from loss of appetite, by way of general debility, to heart-failure.

4: Up de Graff--241-243 (1897) 1923 Jivaro-3
116, 484, 427, 152

Still we persisted, keeping them at the paddles after the fashion of galley-slave drivers. They were by this time a miserable, dejected crowd, keeping any way on the canoes, complaining of their ills, and bemoaning the certain death that awaited them if they continued."

4: Up de Graff--243-244 (1897) 1923 Jivaro
116, 484, 152, 787

"On the eighth day the climax came. We sighted an island, which seemed to be ideal for pitching camp, and put into shore with the intention of deciding once and for all, what we were going to do with those treacherous and demoralized creatures who moaned and babbled between every half-dozen strokes of the paddle. But we were not destined to play an active part in the settlement of the problem, after all, for no sooner had we landed and lain down to rest than Pitacunca, by virtue of his high office, had resort to the never-failing hayahuasca (bitter wine--Inca). The plant is the means by which the medicine men of the Upper Amazon throw them[244]selves into a trance (in reality a state of drunken semi-torpor) from the depths of which they utter prophetic statements which are received with as much reverence as were ever those of the Sybil. Their power for good or evil is thus unlimited, for they pour forth their visions to a spell-bound audience which hangs on every word."

4: Up de Graff--244 (1897) 1923 Jivaro
116, 787, 152

"That night Pitacunca was determined to go no further. He drank his hayahuasca with his 'prophecy' prepared. Within a minute he was rolling about on the ground, groaning, vomiting, sighing, and wailing out his awful warning to a concourse of terror-stricken individuals, who wished they had never been such fools as to venture up the Santiago for the sake of a shining axe.

'Your homes are on fire and your families fleeing through the woods,' wailed Pitacunca, his voice rising above the moans of his audience; 'the Huambizas have taken off half your wives into captivity; but far worse than all the Huambiza devils in the Santiago valley, comes the news to your fugitive children that they are running from their attacks only to be stricken down with smallpox that walks abroad among our people (renewed groans); hungry and homeless, they know not where to turn (a positive hurricane of wailing); black ruin and death await you all, if you return not to stem the tide of disaster.'

With a final long-drawn-out sigh, Pitacunca ceased. But he had done his work. Panic ran riot in the camp. Muttering and whimpering, the Antipas ran hither and thither at the bidding of the drunken old fraud who professed to be their protector. We saw that it was useless to expect to get another minute's work out of them. Pitacunca, with an invincible superstition at his back, had won the day."

4: Up de Graff--244-245 (1897) 1923 Jivaro
116, 756, 787

"Among all the Jívaro tribes the medicine man is omnipotent but short-lived. He lasts as long as his [245] prophecies are not too disastrously wrong. Sooner or later he leads his people (of whom he is virtually chief) into disaster, having made a bad guess, and is sacrificed by those who before followed his every word. Plain proof of the blind credulity of his followers is to be found in the manner of his qualification for his office. Some ambitious old fake with his eye on the coveted post takes a reed-flute (the only instrument except the tom-tom known to the people) and (according to his own story) goes off down the river at dead of night, alone, for many miles, where he seats himself on a sand-bar and plays till the anacondas come out of the water and dance round him. Many times he tries, until at length one morning he walks into the settlement and announces that his great powers have at last prevailed, and he has enticed the serpents to his very feet. And so his authority is born. In times of peace he is the official weather-prophet and astrologer, indicating the proper phase of the moon in which to plant; he is the one and only jambi-chemist; he is the doctor, with a forest full of remedies at his command, and it must be added, in all fairness to him, that he understands the use of ipecacuana, quinine (bellacacara in Inca), and a number of the natural drugs which he extracts from the forest, some known to modern science and some not."

4: Up de Graff--245-247 (1897) 1923 Jivaro-1
116, 757

"He [KS: the medicine man] is at his best as a curer of ills. Several times we had occasion to call in Pitacunca himself and he made speedy and efficacious cures, albeit with a great deal of hocus-pocus on the side. Once Morse was suffering from an ulcerated tooth, and 'Pete' volunteered to cure it in a few minutes. We had much ado to persuade the patient to allow the treatment to commence, and still more to allow it to go on. Morse was stretched out on his back on the sand, and the [246] 'doctor' sat down by his head and commenced a chant. At the end of each verse he sucked his patient's cheek noisily, and proceeded to produce from his own mouth an ant, a shell, a good-sized spider, a snail or a small crab, after which he would show us what he had 'extracted' and go into a fit of violent vomiting. Then another verse commenced with the same result; and so on, until he had produced a hatful of insects, dead or alive, after chanting some twenty verses. Meanwhile it was all we could do to keep Morse down. Finally the 'doctor' chose a live coal from the fire, blew it to a red heat, and asked Ed. to open his mouth. The latter took one look at the offer and jumped to his feet. After it had been carefully explained to him that he was not expected to swallow the burning embed, but only allow it to be held, in a mussel shell in his open mouth, he assented. Then came the real cure. Pitacunca broke up into powder some fine leaves (I didn't learn what plant it was) and scattering them on the hot charcoal, held the latter in Morse's mouth so that the fumes from the leaf powder passed round the bad tooth. The pain left him within five minutes and never returned. If it was a coincidence, it was a very remarkable one.

4: Up de Graff--245-247 (1897) 1923 Jivaro-2
116, 757

On another occasion, I myself had been bitten by a fly which deposits an egg under the skin which grows into a fat worm. I was suffering from the repeated attacks of the grub, which was embedded in my back. Once more Pitacunca volunteered assistance, which I gladly accepted. He asked for a cigarette, which I rolled and proffered him. He smoked it and blew through a fluff of cotton causing the nicotine to condense. The usual incantations commenced, and continued for about ten minutes (as many verses sufficed, apparently, to extract a worm!). With his [247] mouth close to the spot where the worm lay, he made a funny indescribable noise understood by the worm to be the only tune worth coming out to hear, applying the cotton at the same time. Well, out he came, sure enough (driven out, no doubt, by the nicotine, to whose cleansing qualities I have referred before)."

4: Up de Graff--247 (1897) 1923 Jivaro
116, 756, 726

"In times of war, the medicine man accompanies the fighting men (he fights himself, too) to cast spells on the enemy, to foretell victory (invariably), and to render his comrades-in-arms immune from hostile influence. Finally, he alone can make the pots in which the fruits of battle, the heads of the enemy slain, must be treated."

4: Up de Graff--247-248 (1897) 1923 Jivaro-1
116, 484, 153, 437

"To return to my tale, then, the canoemen had to go. But we were determined that they should not carry off with them the wage which they had done so little (and that little so very unwillingly) to earn. It would be a bad precedent to set, for, if ever we had occasion to need their services or those of any other of their tribe again, we should start at a disadvantage if they thought they could fool us, as they certainly did, despite our precautions.

We made them build us a shack that evening on the island, and next morning a permanent shelter on the mainland, in which to cache part of our stores against our return, being unable to paddle so great a weight up-stream without their help. They all worked hard and with a good will, for freedom would be theirs within a few hours. Then we broke the news to them that they must return their axes and machetes, having failed to keep their contract. After the usual pow-pow they were handed over. It was not so peaceable a transaction as it might have been, for we had to hold them up with our rifles before we could make them give up our property. And then they went. [248]

It was not till they had been gone two hours or more that we had the idea of opening our cases of stores to see that all was in order. Half the axes and machetes and three-quarters of the poison had gone. Now the boxes and cases in which they were carried were purposely fastened with long screws, the secret of which we had not thought that any savage would discover. But, too late, it dawned on us that I myself had been indiscreet enough to open a box one day when that old thief Pitacunca was looking on. So, day by

day, as we had been pushing up the Santiago, more and more stores were carefully extracted (the Jivaros using the very machetes we had given them as screw-drivers in just the same way as I did myself) and cached as we travelled along in the heavy verdure which lines the banks of that river. So it happened that they drew ten times the pay they had contracted for, after all. It was too late to do anything in the way of revenge. Had we had a speed launch at hand, we might have caught those stalwart robbers, but hardly otherwise. They must have reached home in one day's paddling. We never saw Pitacunca again.

The loss of that fine poison which Morse and Iberico had gone to such pains to obtain in the Huallaga River and bring along with the Exploradora, rankled in our minds for many a long day, aggravated by the thoughts of the sweet revenge which we could have taken, had we known in time, by appropriating that fine canoe in which the Jivaros escaped and turning them loose to their own devices on the bank."

4: Up de Graff--250-253 (1897) 1923 Jivaro-1
116, 726, 484

"Sweeping along under the right bank came fifty-five Jívaro canoes in single file, a huge serpent moving with perfect rhythm. [251]

Tuhuimpui, as we soon learned was the leader's name, landed on the point of the island, stuck his spear head-down in the sand, and advanced for a friendly pow-wow. His great following had shown a keen desire to overrun our refuge at his heels, but I had ordered him, at first sign of such a movement taking place, to command his party to retire to the main bank, and await the result of our parley. We were perfectly safe as long as we kept a strip of water between us. So the pow-wow began. The Aguaruna chief bore himself with conscious pride of office. His manner had not a trace of servility. He, by reason of his position and his knowledge of Inca had been elected as spokesman, and he was every bit as good as any apache.

'We have heard that you have come searching for gold,' he began. 'Here on this river are very many Huambizas, evil men, who kill the apaches and steal their women. I myself have talked with the apaches and been to Barranca, and I know. You will be killed, so we have come here to take you back to safety. The Huambizas carry weapons such as yours' (indicating by signs and sound the firing of a rifle). [252]

'I have heard,' I replied, 'of the great chief Tuhuimpui down-river, and know him to be a friend of the white man. Clearly has he proved his friendship once more by coming on this errand fraught with perils to give us his advice and protection. To prove our mutual regard, we must drink together.'

4: Up de Graff--250-253 (1897) 1923 Jivaro-2
116, 726, 484

The rum-barrel is produced, and a stiff drink handed out.

It is a curious fact, and one which throws a good deal of light on the much-discussed alcohol question, that any ignorant savage in the world will appreciate to the full his first drink of rum. It would appear that there is something in the natural constitution of man that answers to the call of alcohol.

'I would have you know,' I went on, 'that we appreciate your offer, but that we fear no Huambizas nor any other; we come in peace, but if attacked we know how to defend ourselves.'

The chief retires to the water's edge, and calls across to a fellow chief to put over to the island to consult with him. In the long line of canoes the warriors sit, watching the proceedings.

'Midia, midia,' cries Tuhuimpui (come, come), and an Antipa chieftain steers his canoe across the stream.

I have joined my comrades in the shelter and we discuss my interpretation of the pow-wow. We decide that we must try and get the whole war-party to go up-stream with us; their help would be invaluable.

In a few moments I am back talking with Tuhuimpui, who has returned from his conference with the Antipa.

'We are a war-party, come to kill the Huambizas.' Tuhuimpui turns with childlike simplicity to this new story.

'We will help you, then, for they are our common [253] enemy,' I answered. 'Let us join forces and push on together.'

Thus we struck a bargain. We were far from being deceived as to what was the real object of our new allies. Once more that canoe-load of presents was shaping the destinies of men. But all the same it suited us to avail ourselves of their help to penetrate further up-river, laden as we were with heavy stores."

4: Up de Graff--253-254 (1897) 1923 Jivaro-1
116, 484, 152, 726

"Next morning we started. All day long we sat and watched the great rhythmic strokes of the paddles, as the canoes flew along. Our escort was composed of some two hundred men of the Aguarunas and Antipas, evidently two parties which, finding each other bent on a common mission (which needs no explanation) had joined hands. By day they mingled so that there was no distinguishing the two parties, but by night they camped apart, suspicious, probably, of each other for they are natural enemies. Each carried with him a new loin-cloth, a rouge-pot, feather ear-ornaments, a záparo (rattan basket --Inca) of giamanchi, a spear, and a half gourd for a drinking-cup. Some had blow-guns with them also. They were for the most part naked. They were an impressive-looking crowd, and they took very little notice of us white men, with the exception of their chiefs with whom we had all our dealings.

The first day, everything seemed to go swimmingly. In the late afternoon we drew up on a sand-bar and pitched camp. Tuhuimpui volunteered to provide the game throughout the journey, and he certainly made a good start that day. He advised us not to use our rifles for hunting, as they might carry news of our whereabouts to the Huambizas, which seemed to us fair enough. We had our choice of supper from a great pile of game of all kinds--turkeys, pheasants, monkeys and wild hogs, principally--and selected what we wanted [254] before the rest was removed from before our tent. After supper, the chief came along with a basin-full of giamanchi; we were to drink deep of the comforting preparation and sleep in peace, while the Indians kept watch all night! To escape from

this doubtful blessing. I mixed a cup of condensed milk as a counter offer. If there is one thing which a Jivaro abhors it is canned food in any shape or form. The trick worked, for no more was said of drinks that night.

And how could he be expected--I went on, after disposing of the giamanchi difficulty--to find the guard all night, and leave us to sleep in slothful ease? Surely to this we could never consent. We would do our fair share. Indeed he must warn his men not to approach to within fifty yards of our camp, for our sentries would fire on suspicion--and who could distinguish between enemy and friend at night? In the common cause we must take half the burden on our shoulders, and we must carry it well. Too much care could not be taken now that we were so near the enemy, and what a disaster it would be if in our zeal we killed some of our own friends! No, there was no getting away from the fact that they must be very careful not to approach our bivouac at night."

"One day we came to a place where the river had cut a new channel and left the still warm water in a loop of the old bed. Here we had a chance of making some highly interesting experiments with that freak of nature, the electric eel. The water at this point was teeming with these fish and with rays, both of which are considered as great delicacies by all who inhabit the banks of the Amazon rivers. The former grow to an average length of three to four feet, being as many inches [256] thick. They seem to have no entrails except one straight canal, about the thickness of the little finger, which runs along the underside of the body from the head to the vent. Their general appearance is similar to the common fresh-water eel; they are slow swimmers, and therefore an easy prey to the spear. They are so heavily charged with electricity that a man cannot possibly retain his hold of a metal instrument if it comes in contact with their skins, or even with a metal pail in which one is swimming. Of course I was carrying with me no electric instruments with which to test their voltage, so could only measure the force of the shock they can give by touching the fish myself. With my machete I attempted to cut the head off one which had been speared and landed. I might just as well have tried to cut a trolley-wire with uninsulated pliers. The machete flew out of my hands and my arm was temporarily paralysed.

We finally picked up a small eel two feet long, and put it in a pail of water. We satisfied ourselves that it was perfectly safe to touch the fish, the pail or the water with a wooden stick, tending to prove that electricity is generated, and that the shock is not

due to any form of vibration.

Their [KS: electric eel] peculiar internal organism makes it possible to prepare them for eating by simply slicing them as one does a loaf of bread, no cleaning being necessary. Their meat is pure white and firm, and they make an excellent dish when fried. In this respect they are superior to the rays of which we also caught many.

It has occurred to me that the risk of swimming any stream infested with electric eels would be very great, for, as the natives of the Amazon basin confirm, they attack and kill other living things with the strong current with which nature has charged them. Two or [257] three such shocks as I myself received would be enough to paralyse the muscles of the whole body and cause death by drowning. In saying that these fish attack other creatures, I do not wish to infer that they are either carnivorous or vicious--merely that they use their natural powers instinctively in self-defence."

4 Up de Graff--257 (1897) 1923 Ticaco
116, 137

"It may be worth mentioning that it was here that I discovered for myself, with no previous knowledge on the subject, that those beautiful coffee coloured seeds which are picked up both on the Atlantic and on the Pacific shores of the two Americas, and are known as sea-beans, grow in huge quantities along the banks of the Upper Amazon and its tributaries. They grow in a pod like peas on a plant and when seeding time comes round large numbers of them fall into the water and begin their journey of several thousand miles. They are, of course, treasured by many people as a gift from the sea, which, strictly speaking, they are not. Doubtless they abound on the banks of many other tropical rivers. We put them to no practical use, but it was at least amusing to find 'sea-beans' over three thousand miles from the sea by the course they have to follow."

4: Up de Graff--257-258 (1897) 1923 Jivaro
116. 137

"Many a time, on that journey up the Santiago, exploring the vicinity of our camp, while the Indians were out with their blow-guns after game, we came across fine vanilla-plants. These plants grow there in profusion, clinging to every kind of tree. The pods are twelve inches in length, being fatter and more fragrant than the ordinary commercial article. Their flower is like a small orchid, to which family they belong. The dark humid forests of the Amazon produce enormous numbers of beautiful specimens of every member of this same family, from the huge scarlet bell-shaped variety of the plant which weighs upwards to [258] a hundred pounds to the tiny purple specimens, somewhat like a violet in form, which cling in great masses to the roots of the trees and vines. Curiously enough, I was never able to find one that gave off a pleasant scent, though many times did I come across beautiful blooms with disagreeable odours. For the orchid collector, this would indeed be a wonderful hunting ground."

4: Up de Graff--258-259 (1897) 1923 Jivaro-1
116, 136

"On the evening of October 23rd Morse and I went off up-stream a few hundred yards to take a look round the next bend, the party having halted for the night earlier than usual, to make a careful search in the forest for indications of the recent presence of the enemy. We had a curious experience with an anaconda (the fourth and last which I found alive in the Amazon basin). I think the incident is worth recording, as being unique in all my travels, and as showing how inoffensive these great reptiles are during their period of dormancy. I cannot do better than quote from my original impressions:

'Having sighted the great reptile coiled up on a fallen tree which lay half in the water, half on the bank, we paddled quietly up to within a yard or two for closer inspection. It lay in a pyramid of coils, apparently sleeping. Surprised that it did not move, we splashed [259] water on it to wake it up; there being no result, I started to prod it with my paddle, and still meeting with no success, I lifted my paddle and brought it down on the snake's side with a resounding whack that actually broke the blade. It squirmed a little, but soon lay still again. Determined to get a closer view, I climbed out on to the log and kicked the fat black coils. It showed some signs of animation, so I got back into the canoe and continued to prod it. Finally it awoke, slipped into the water while still half rolled up, and swam leisurely away on the surface, giving us a good chance to judge its length. Comparison with the twenty-four foot canoe showed it to be some thirty feet long. Its indifference to our attacks was amazing, in view of our previous experiences

of the same species on the Yasuní. Moreover it did not appear to have eaten recently, no swelling being apparent.'

I did not enlarge very much at the time on the impression which the experience made on my mind, but it has stayed with me ever since in a very vivid form. It would appear that at one season of the year this otherwise alert, powerful, swift-moving creature lives in a state of slothful torpor from which nothing but the rudest shock will awake it. The contrast is astounding, and in this particular case all the more so, as there seemed to be no outward sign of any reason for the anaconda's dormancy. It was long and thin (thinner indeed than the three others I had seen). It might have been expected to uncoil and lash out at the first sign of our approach, but instead it behaved like a tame angle-worm."

4: Up de Graff--260 (1897) 1923 Jivaro
116, 726

"On the 26th of October, no sign of the Huambizas had yet been seen. During the morning of that day we were paddling along in the usual formation, Indian file, when suddenly a commotion started among the leading canoes, followed by a 'trombone concert.' Something which had been picked up out of the water was being handed round for inspection. On pushing up to the front of the column, we found that the centre of interest was indeed worthy of attention. It was no less than a piece of charred wood. So at last we were in touch with the enemy. After a lot of talk it was decided that we should push on and try and find the probable point from which it had drifted.

Paddling ahead for the remainder of the morning, we halted on a very long sand-bar for a mid-day rest. There was a feeling of war in the air. The Jívaro party seemed to have settled down at last with a will to the prospect of attacking their long-standing enemies. There remained but one stepping-stone to be crossed before they would reach a state of white-hot zeal for the attack--the omens must be read."

4: Up de Graff--260-262 (1897) 1923 Jivaro-1
116, 726, 789

"The meal over, the Indians disappeared into the forest which came down to the edge of the sand. In a few moments they were back, each man carrying a branch from a tree which bears a small green berry. (I was never able to identify it.) Some of the berries they stripped from the twigs, and the branches them[261]selves they planted in the sand in a long straight line parallel with the river. Tuhuimpui strolled up to me unconcernedly. 'We are going to make it rain,' he said simply. 'I hope you will not bring down enough to drench us and our cargo,' I said with mock solemnity. 'Never fear,' came his grave answer, 'only a light shower. To-night it shall rain and thunder and blow, but before we summon the storm, we shall build you a house.'

I was taken aback to say the least of it, for it seemed to me that he had very little hope of success, for all the effect a row of branches would have on a clear blue sky, the same sky which had smiled on us since we turned up the Santiago from the Marañon. In deference to his gravity, however, I said nothing more. On the contrary, I persuaded Jack and the rest to come along with me and take part in the show. So we cut our branches (we were not allowed to bring any but the right kind) and planted them.

The berries which they had pulled the Jívaros put into snails' shells, and threw into the river with a good deal of tom-foolery in the way of chanting and solemn gesture. (We used to call this kind of thing 'monkey-business').

And then we simply embarked in the canoes and left the playa to itself.

Within half an hour, gentle rain fell. A light cloud had gathered I know not whence

for the first time for three weeks. Now it may be said that it was a pure coincidence, but it was at the same time very strange that Tuhuimpui's efforts should so strikingly produce a result after so many perfect days had passed. It should be remembered that the rainy season does not set in, properly speaking, until the middle of January. Even down to the smallest detail the Aguaruna chief was right. [262]

The gentlest of sun-showers fell that afternoon--enough to freshen us all up, but only enough. Morse and I discussed the process of rain-making with the Indians. We discovered that Tuhuimpui had been making a test of his favour with the god Yacu-Mámam, the controller of Rivers and Rain, and that had he left the newly cut branches planted in the playa below to wither and die, our attack would never have been made. Without the River God's help, disaster would have overtaken us; but this gentle shower to refresh the tokens planted for his favour was his answering sigh of approval and protection in their mooted ventures.

'You see the power I wield,' grinned Tuhuimpui, finally. Suddenly his manner changed. Gravely he gave utterance to the sentiment which lies closest to the heart of every Jívaro. 'Now indeed we shall return with many heads'.... But in a moment he was boasting again. 'This is nothing to what will fall to-night,' he said mysteriously. 'It will thunder, there will be lightning, a great wind will blow; a storm will rage, Yacu-Mámam will smile on me.' "

4: Up de Graff--262-263 (1897) 1923 Jivaro
116, 726

"By six o'clock that evening we had found what the Jívaros had been looking for since we picked up the piece of charcoal. We discovered the mouth of a stream which ran into the Santiago, covered so effectually with heavy undergrowth that it was invisible from the centre of the main river. Why, I do not know, but the Antipas and Aguarunas who guided our destiny decided at once that this was where the enemy was to be found. So a scouting party of four picked men was told off to take a canoe and spy out the land. They slid off noiselessly [263] and disappeared in the gloom of the forest vault, moving with the catlike stealth of men who know that detection means death.

The chiefs signed to the rest of us to make for the bank of the Santiago opposite the mouth of the stream. Here we left the canoes, climbing ashore with great care on logs which had fallen over the bank, so as to leave no trail. Tuhuimpui was very particular that we should land in this way, himself supervising the operation. Next, a party of Jívaros collected all the canoes, moored them to the trees with bejuco strands, and half-filled them with mud dug from the water's edge. They sank from sight one by one, until of all that gallant array of craft there was no sign left. The bejucos appeared to be but vines which had lost their hold and fallen into the river--only a tiny detail of the vast network of tangled undergrowth which chokes the forest from end to end of the Amazon basin. The Antipas withdrew in the tracks of the main party which had moved into the forest, and anyone passing the spot in dugouts five minutes later could never have suspected the presence of a war-party."

4: Up de Graff--263-264 (1897) 1923 Jivaro
116, 726

"Dusk was gathering by this time. Tuhuimpui, in solemn preparation for the storm which was due to rise, ordered the building of shelters for all his men and a specially well-built one for his white allies. In an hour the camp was pitched--one half for the Aguarunas, the other for the Antipas, our own shelter in the middle. Each of them was about thirty yards from us. We set to work to thin out the undergrowth all round our camp by way of precaution. There was no knowing what these friends of ours might be doing if rain fell a second time at their bidding! We felt cramped, too, and hedged in by darkness after the safety of the river and open playas. I think as a matter [264] of fact, that in their anxiety to be after the Huambizas, they had by this time forgotten us more or less, or at any rate relegated us to a place of secondary importance; we should come in handy after the Huambizas had been routed, perhaps."

"We lit fires round our shelter, as the Jívaros themselves had done, and sat up for many an hour, spectators of the weirdest scene I have ever witnessed.

Tuhuimpui arrived at our shelter with a great gourd full of what looked for all the world like chutney sauce.

'We are going to paint,' he announced. A short interrogation sufficed to satisfy myself that this was huito, a kind of giant walnut, of which the outer shell contains a stain or dye, in just the same way as a butternut or a black walnut. The thorny root of a palm is used as a grater to reduce the outer shell to pulp. With this the skin can be dyed jet-black, simply by rubbing it in in the wet state. All the Jívaro tribes use it to paint themselves for battle, and are indeed loath to attack without doing so. It may be that they want a distinguishing sign so that in the excitement and confusion of the fight in close country a glance will suffice to tell friend from foe. I think, however, that this is a very unlikely explanation of the custom. [265] It is more probably a part of the usual panoply of war in which all savage tribes indulge.

The same huito is used extensively in the small towns, villages, and posts of Ecuador and Peru bordering on the Jívaro territory, by half-castes who are not as dark as the Indians, nor yet as light as the Spanish. They (chiefly women) stain their faces, necks, arms and hands with it in the belief that when it comes off it takes some of the black with it! They go about their ordinary occupations with it on, it being accepted by all as powder is on the beach. So durable is the stain that only time will bring it off; three weeks

or a month are required to efface it altogether. This temporary sacrifice of appearance is willingly made in their desire to cast off the taint of Indian blood.

We all readily agreed to paint up in preparation for the attack on the morrow. So we stripped, determined to do the thing thoroughly, and each saw to it that his companions did not overlook any odd corners. Even Jack's bald spot did not escape attention. The effect of the application of this dye is not immediately apparent. So it was not till morning that we noticed any change in our appearance. The rising sun, however, revealed to us the full possibilities of huito. Not only our skin, but even our hair and eyes seemed to have changed color overnight. We laughed till we were nearly sick. The Jivaros hearing the uproar, thought we were having a war-dance of our own. Tuhuimpui came over and inspected us, surveying with a face unmoved a scene the absurdity of which no white man could have resisted."

4: Up de Graff--265-266 (1897) 1923 Jivaro
116, 726

"But to return to the night's vigil. A moment after Tuhuimpui left us, he returned to tell us of the safe arrival of the scouting party. The enemy had been [266] located. The scouts had approached to within a few yards of a small settlement and had actually counted the warriors. With consummate skill they had withdrawn unseen. Had I not had so many personal experiences of these men's amazing skill in scouting, I should not have believed it possible for any living thing larger than a humming-bird to approach within earshot of a Jivaro in the forest.

Having painted themselves from head to foot, the Indians began to prepare themselves for the war-dance. Each camp built a huge fire, and supplies of fuel for the long night were stacked beside the shelters. At a given signal every man leapt to his feet, grabbed his spear, and all joined in a great capering throng about the blazing fires; with raucous yells they danced and danced and danced, two bounding swaying circles careering round the blaze, spears shaken in grim emphasis of the threats they hurled at their unsuspecting enemies.

Now the whole crowd would be scampering round the flames, now a few tireless warriors who had outlasted their fellows; sometimes a solitary enthusiast would prance and yell to the delight of the squatting onlookers, uttering curses and vowing vengeance on the Huambisas who had stolen from him a wife."

4: Up de Graff--266-267 (1897) 1923 Jivaro-1
116, 789, 726

"Suddenly with a clap of thunder the promised storm broke on the scene. Here was everything that Tuhuimpui had predicted--one of those summer storms of great intensity but short duration which occur in the tropics alone. Once more the necromancer's spell had worked. Even as he had said, the wind raged and the rain fell in sheets to the accompaniment of the thunder and the vivid lightning. So great was the fury of the elements that we had to post a sentry outside our shelter to warn us of falling limbs. All around [267] the cave they came crashing down--any one of them enough to obliterate us and our puny cover.

In half an hour it had passed, and we were out again, uncovering the fire and restoring it to life while the dying wind swept the last drops of moisture from the forest roof. It had passed, but left behind in every Jívaro heart an undying faith in the prowess of their chief. Sure of their victory now, the savages bounded to the dance with redoubled energy, cavorting and pirouetting in a mad frenzy of hatred and battle-lust. All night long they kept it up, a pack of tireless demons. We on our part had no recourse but to sit with our rifles at hand and wait for dawn. Sleep had no charms for us while that waking delirium possessed the Indians, fanned to white-heat by the splendid augury of the storm.

It is useless for me to attempt an explanation of the prodigious success with which Tuhuimpui met that day. I cannot allow that it was merely a case of coincidence. The correctness in detail of his prognostications may suffice to confound that theory. No;

4: Up de Graff--266-267 (1897) 1923 Jivaro-2
116, 789, 726

either he knew by some sixth sense which many animals possess that there was rain somewhere near (a thing almost unbelievable, since there was apparently no difference in the barometric conditions of that day and the preceding days) or else he was able to detect the coming of the rain by a minute observation of the movements of certain animals, or even insects, signs which would mean nothing to any but the most highly trained child of the woods."

4: Up de Graff--267-268 (1897) 1923 Jivaro
116, 726

"With the coming of dawn, groups of weary savages were to be seen lying about and preparing leisurely for the fight. Exhausted by the night's revelry, they seemed but poorly fitted for the trials of battle. But our ideas [268] of battle differ very markedly from theirs. The long strain of a modern engagement is a thing undreamed of by these lovers of cunning and surprise. For us it may be a matter of days or weeks, for them it is one of minutes.

Here and there they strolled round the dying embers, busy with rouge-pots, feathers and loin-cloths, black from head to foot with the huito which had taken effect during the night hours, their black pointed teeth bared in a grin of anticipation--a band of veritable demons straight from Hell. But grouped round the fire which still burned before the central shelter of the camp was a company of creatures which fell not far behind them. Tousled, bewhiskered, stained the same ebony black, we sat and cooked our breakfast. Game, it was agreed, outstripped the rest of us in hideousness. With his mop of sandy hair, a three month's old ginger beard, blue eyes, great thick-set body half-clothed in ragged shirt and pants, every inch of skin as black as night, he was indeed a fearsome creature."

4: Up de Graff--268-269 (1897) 1923 Jivaro-1
116, 726

"Breakfast over--for the Jívaros a drink of giamanchi sufficed--we all moved off to the water's edge. The moment had come for the attack. The savages with their new loin-cloths, rouged faces, tufts of lumbiqui feathers (red and yellow balls of fluff) in their ears, looked a formidable company. Quietly we raised the dugouts, and made across to a sand-spit which extended from the mouth of the stream, up which we were to go, to a point some two hundred yards down-stream, an excellent base for the day's operations. Here a party [269] composed of old men and boys was told off to guard the canoes. Of the latter I have said nothing. A few lads of nine or ten years of age accompanied the party to learn the art of war from their fathers. It was manifest throughout the trip that they were happy and proud to have been called to an apprenticeship in the chief business of life.

Led up by the scouts who had come in the night before, in a long single file, we made our way into the forest, and moved up the left bank of the stream. According to plan the savages split up into two parties, the Antipas made off into the jungle on a detour, to take as their objective the further of the two settlements which had been selected for the raid, while the Aguarunas clung to the bank of the stream, moving on the nearer. We (black) white men brought up the rear of this latter column under the personal supervision of Tuhuimpui, who lived in fear and trembling of our clumsy movements. Game alone, had he come within a quarter of a mile of the enemy before the surprise had been sprung, would have queered the pitch. It was one of his whims never to go barefoot,

with the result that he was forever the victim of his own shoes. They caught in the vine-roots, they were sucked off his feet by the mud, they slipped in the moss and they were ever half-full of dirt--an interminable nuisance which their owner could never be persuaded to abandon. Tuhuimpui protested in vain, while Game went crashing through the undergrowth with the delicacy of a tapir. At last it was too much for our chief. He stopped us. We were to wait till the attack had begun."

"No sooner had we halted than there came to our ears the whang-whang of a machete on wood. So we were actually within earshot of a settlement at last. [270]

It is at this point in my narrative that I must pause a moment to make a few comments on Jívaro methods of warfare. They are utterly distasteful to the white man--the true white man who is brought up to a code of fair play. The attackers display no bravery, the attacked have no chance to defend themselves. As a cat creeps up behind a bird which is digging up worms, so the Jívaro attacks his enemy. A square hand-to-hand fight he will not entertain. With all his paint and feathers he is, unlike the North American Indian, a coward at heart. I must have given the impression in the foregoing pages that our heart was in the business; but such was not the case. We used the war-party for our own ends--they were our only means of getting up-river with our kit, once Pitacunca had deserted us. To have left them to attack the Huambizas alone would have been to stamp ourselves in their eyes as cowards. To have turned them from their purpose would have been to place ourselves between two enemies, each waiting as anxiously as the other for our heads. So there was nothing for it but to indulge Tuhuimpui's caprice in the hope that the affair would prove to be but an incident in our onward movement.

So we sat and listened to that single distant clanging of steel on wood, the only sign of human life in all that vast forest into which a moment ago two hundred men had melted. Whang-whang came the sharp-cut noise of the blade falling on a paddle which was

never to be finished.

With a hideous yell the van of the attackers leapt from cover, a bare ten yards from the nearest of their prey. We jumped to our feet at a word from Tuhuimpui, and in a moment were rushing to the scene of the slaughter. (The moment was a tragic one for Game, who left his [271] shoes in the mud, only one of which he ever recovered.) We never fired a shot, either in attack or defence that day. When we arrived at the scene of action, we found that the settlement, a mere handful of savages, male and female, had been rushed. The game was up."

"A victory on the battlefield is for these Upper Amazon Indians the signal for the most hideous, the most significant of all their rites to be begun. On that never-to-be-forgotten day the whole scene was enacted before our eyes, an experience which it has, perhaps, never been the lot of civilized beings to undergo before or since. That is a sweeping statement, and at the best I am only assuming the probable, but I can only say that neither I nor my fellow explorers were ever able to discover, directly or by hearsay, that this ghastly performance was ever witnessed by any other white men. Certain it is that in all my conversations with prospectors and rubber-hunters, I have never heard of any but the most conflicting conjectures as to the mode of preparation of the Jívaro heads.

The comparatively little that has been written about the process through which they pass--and they are relics of war which are unique in all the world--has been invariably, as far as my study of the question goes, based on the hearsay evidence, often incorrect in essential details, of the white or half-caste planters or priests whose lives are spent at stations situated on the fringe of the real Jívaro head-hunters' country, the basins of the Marañon and Santiago within a radius of some three hundred miles from Borja. [273]

It would seem that this rite is so closely guarded a secret, by reason of the inter-racial hatred between white man and brown man, and the obvious natural obstacles in the way of him who would explore these regions, that the ceremony is destined to be observed only by a very few. It must indeed be a strange set of circumstances, in which

chance must play no small part, which will combine to show a white man what we were compelled to observe.

Thus my account of the events of that day constitutes, if I may presume to say so, an authentic description of a process which has baffled many a commentator on the subject."

4: Up de Graff--273 (1897) 1923 Jivaro
116. 727

"Those of the Huambisas, then, who had been fortunate enough to escape from the spears of the raiders had fled to the shelter of the largest of the little group of houses which had been attacked. There cannot have been more than ten or fifteen of them shut up within its walls, but the Aguarunas had not the spirit to attack them now that they were aroused. That is the Jivaro way.

The enemy having left their dead and dying behind them in their flight, the victors dashed forward to seize the most highly treasured of the spoils of battle--the heads of the enemy slain. With stone-axes and split bamboo knives, sharpened clam-shells (rubbed to a keen edge on sand-stone), and chonta-wood machetes, they went from corpse to corpse, gathering and stringing their gruesome emblems of victory."

4: Up de Graff--273-274 (1897) 1923 Jivaro
116, 727

"I must mention that no delicate considerations of sex are allowed to interfere with these rites; a woman who fights, or a woman who refuses to accompany the victorious war-party to their homes and serve a new master, exposes herself by the acknowledged code of warfare among these people to the risk of suffering the same fate as her menfolk. Indeed I myself happened to watch [274] the fate of a Huambiza woman who had fallen in the fight wounded by three spears. Little did we imagine what the ultimate issue might prove to be, when we attacked that morning.

The woman lay where she had been borne down by the spear-thrusts. The Aguarunas, eager to collect her head, went to work while she was still alive, though powerless to protect herself. While one wrenched at her head another held her to the ground, and yet another hacked at her neck with his stone-axe. Finally I was called upon to lend my machete, a far better implement for the work in hand. This was truly an act of mercy, to put the poor creature out of her misery as soon as possible. It was a truly hideous spectacle. But it must be remembered that had we attempted interference, we were but five in a horde of fiends, crazed by blood and lust. When at last the head was severed, it was strung with the one other which had fallen to the lot of our party."

4: Up de Graff--274-275 (1897) 1923 Jivaro
116, 727

"Stringing of the heads is in itself an art, the object of which is to facilitate their transportation. They are strung on thin lengths of pliable bark stripped from some nearby sapling, which make a first-rate substitute for the hempen cord of civilization. These bark-ropes are passed through the mouth and out at the neck.

The party then set to work to loot the houses from which the occupants had been driven. Nothing escaped the raiders. I was there in one of the houses with them, and well remember the motley collection of things that we found. There were Peruvian coins, china cups and saucers, a butcher's knife, a number of red bandana handkerchiefs, all evidently looted from Barranca, a Jívaro hand-loom with a half-finished piece of cloth on it, an iron spear-head, and a number of small Jívaro household objects which are to be found in any settlement. Nothing was too small to escape the Aguarunas' atten[275]tion. They cleaned out the house from end to end, every man keeping for himself all he could lay hands on. Then they fired the roof, and in a moment the whole house was ablaze, the great heat roasting the decapitated body of the Huambiza woman."

4: Up de Graff--275 (1897) 1923 Jivaro
116, 727

"It will be remembered that a party of Antipas had separated from the main body, as agreed between the Indians before the attack, to storm another group of hutments further up the creek. It was at this moment, then, that we decided among ourselves to push on after them and see how they had fared. We had not gone more than a few yards when we were met by the same party returning, laden with dripping heads. No less than nine they brought; some tied in pairs by their own hair and slung round the neck of one of their conquerors, others slung with bark-ropes. This gruesome procession was led by a short, fat savage; laden with his share of the spoils, grinning in triumph, with his teeth stained black and filed to a point, his thick-set shoulders spattered with the blood of his victims, he was a diabolical-looking creature."

4: Up de Graff--275 [2] (1897) 1923 Jivaro
116, 152, 727

"It seems superfluous to mention that these people, like all cowards, are absolutely devoid of pity. However, they do not indulge in the worst habit of the old North American Indians, that of torturing their prisoners."

"In single file the whole party retreated through the forest to the mouth of the creek where the canoes had been left, hurling threats at the Huambizas and admonitions not to follow, as certain death at the hands of the rifle-bearing Christianos awaited them--all this the merest bluff, it must be said, for in reality they feared an onslaught by their infuriated enemies who were believed to possess some form of firearms stolen from Barranca. To strike further terror to the hearts of the Huambizas, each man of our party indulged in a series of imitations [276] of the human voice guaranteed to give the impression that he was at least six men.

Arrived at our base, with the trophies and prisoners--three children--we settled down to the preparation of the gruesome spoils, destined to be displayed in the glass cases of some great museum or to pass into the collection of a curio hunter at the other end of the world. For, as it happened, they eventually fell to our lot.

While the warriors brought the heads from the canoes to the sand-spit on which they were to be prepared, the children sat round contentedly chewing bananas, all unconcerned at their parents' fate. With the empty canoes drawn up on the sand, outposts thrown out to guard against surprise attack, the sun blazing down on the whole scene, little groups of warriors formed themselves round the heads."

4: Up de Graff--276-282 (1897) 1923 Jivaro-1
116, 727

"The ceremony commenced with the placing of the heads in the sand, face upwards; each naked warrior in turn seated himself on one of them and the medicine men, of which there were two with the party, commenced to chew tobacco (borrowed from me, I remember). Approaching from behind, one of them took a half-Nelson on the seated warrior, drew his head back, took his nostrils in his mouth, and forced a quantity of tobacco juice up his nose. This strange procedure is not without explanation; it is the local equivalent to an anti-toxin against the baneful influence of the enemy's medicine man, a form of protection which the natives firmly believe makes them immune from the disasters and plagues to which their foes can subject them. (I may mention that my firm resolution to take a personal part in the ceremonies faded before the nauseous picture of this, the first degree of that wild brotherhood. Jack aptly termed this performance 'The Bull's Eye Degree.') The effect which this treatment had on the warriors was [277] at once exhilirating and overwhelming--the former on account of their unshakeable faith in its merits, the latter because of its natural physical results.

Recovered from their choking and gasping, the privileged few who had merited this nicotinous inoculation by reason of their having participated in the killing of the victims and dipped their spears in their blood, proceeded to peel the heads.

This is done by carefully parting the hair straight down from the crown to the base of the skull, slitting the skin down the line formed by the parting, hard on to the bone of the skull; turning it back on both sides, and peeling it from the bony structure just as a

stocking is drawn from the foot. At the eyes, ears, and nose, some cutting is necessary, after which the flesh and muscles come off with the skin, leaving the skull clean and naked but for the eyes and teeth.

The incision or slit from the crown to the base of the neck, was then sewn together again, with a bamboo needle and palm-leaf fibre (the chambira from which the hammocks, ropes, fish-lines and nets are made), leaving untouched for the moment the opening at the neck. The lips were skewered with three bamboo splinters, each about two and a half inches long and lashed together with strands of cotton fibre, which held them tightly closed, in the same manner as the sheets of a sailing boat are fastened to the cleats on the deck; tassels being afterwards formed by the frayed ends of the fibre. The eyeholes were closed by drawing down the upper eyelashes. The eyebrows were held from falling by small pegs or props of bamboo, vertically set between the outer rim of the eyelashes (thus effectively holding them in place) and the shoulders of the corresponding eyebrows. The holes of the nose and ears were temporarily plugged with cotton. [278]

The purpose of these several operations was to hold the features of the face in position and to seal the openings, so that the head could again be expanded to its normal proportions by filling it with hot sand and thus permit an even contraction of the whole in the further process of curing. The meat at the base of the neck was 'basted' with chambira, to prevent its wearing and wasting away by handling in the succeeding operations.

In the meantime, several large fires had been kindled and numerous earthenware crocks

filled with water were placed in readiness.

A description at this point of the ease with which the Jívaros start a fire by means of their primitive methods may be of interest.

A hard-wood stick is made to revolve at high speed by means of a bow whose string is wrapped about it, its lower end resting on a piece of pith. The necessary pressure on the stick is obtained by bearing on a flat stone which fits on the upper end of the stick, held in position by means of a small round hole which serves as a socket. The pressure of the stick on the pith sets up sufficient friction to cause the latter to smoulder, when it is easily blown into a flame. This simple equipment is packed with every party as we carry matches. But also, on short trips, the Jívaros carry with them a smouldering hornet's nest, at the end of the branch on which it was originally built, which serves the double purpose of a kindler and of a protection against the swarming myriads of sand-flies and gnats which infest the shores of some rivers during the summer months.

The crocks which are used on these occasions have been made with the utmost care by the medicine men in person, far removed from all human eyes and under auspicious lunar conditions; they are brought carefully [279] wrapped in palm-leaves to ensure the impossibility of their being either touched or seen by any unauthorized person until the moment for the ceremony arrives. For every head there is one of these red, baked clay, conical pots, some eighteen inches in diameter by eighteen inches deep; the apex of the cone rests on the earth, the sides being supported by stones; in this way the fire has

ample access to the greatest possible surface.

The pots were filled with cold water, straight from the river, and the boneless heads filled with sand placed in them. Within half an hour, the water had been brought to a boiling-point. This was the critical moment. The heads must be removed before the water actually boils, to prevent the softening of the flesh and the scalding of the roots of the hair, which would cause it to drop out. The heads, on being removed were found to have shrunk to about one-third of their original size. The water, I noticed, was covered with a yellow grease similar to that which forms when other meats are cooked.

The pots were cast away into the river, too holy to be put to any further use, and the fires were heaped up with fresh logs, to heat the sand on which they stood. For henceforth the sand played an important part in the proceedings.

Meanwhile, those who had been treated, or initiated by the medicine men, namely the participants in the actual kill, were privileged to hold a special ceremony of their own; the naked skulls were taken off, and each group retired a short distance to hold the sacred rites which follow the boiling of the flesh-heads. We were not allowed to participate, as is to be supposed, and furthermore, the temper of the Indians at that particular moment was not conducive to too close an observation of their doings on our part; we were, indeed, convinced by this time of the very real desire which shone through [280] the eyes of our brothers-in-arms to add five more heads, as well as five rifles and a canoe-load of presents, to the day's booty. It would appear that some form of muttered

parley took place, a serious business in comparison with the wild caperings which follow when the skulls are brought back to the main party. The interpretation of these rites was undiscoverable by reason of the fact that the Chief, the sole interpreter among the Jívaros, was far too busily occupied with an attempt to persuade me of the absolute necessity of our going down-stream not more than one white man in any single canoe! The childlike simplicity of these people's natures, the blatant transparency of their ruses, is only another proof of their close proximity to animals.

So the skulls were brought back and stuck on spear-heads, the spears standing upright in the ground, and around them took place a dance, celebrated by all and sundry with wild yells, and the throwing of spears across the skulls from one warrior to another. We had to play our part, leaping and shooting our rifles into the air--but not more than two of us at a time exposed ourselves to the obvious risk of some accidental spear-thrust! With all of us in the ring together, the Indians would have made short work of the party.

By now hot sand had been prepared in large quantities. This was poured into the heads at the neck-opening and while thus filled they were ironed with hot stones picked up with the aid of palm-leaves. This process, which began that day on the sand-bar, is continued in the ordinary way for some forty-eight hours until the skin is smooth and hard and as tough as tanned leather, the whole head gradually shrinking to the size of a large orange. The resemblance to the living man is extraordinary. Indeed, the reduced heads,

when skillfully made, are exact miniatures of their former selves. [281] Every feature, hair, and scar is retained intact, and even the expression is not always lost. When perfected, they are hung in the smoke of a fire to preserve them from the depredations of the multitudinous insects which would attack and demolish them. As I noticed that afternoon, however, the preservation of the features in their former shape is not always the object of those who prepare them; some of the Aguarunas were to be seen deliberately distorting them while they were still flexible, as if in mockery of their enemies. They took a particular pleasure in distending the mouth, which accounts for the expression to be seen on many Jívaro heads.

Into the late afternoon the careful preparation of the heads continued. By this time, all were working with a will to cure them, so that a start down-stream could be made that evening. Time and again the cool greasy sand was poured from the half-dried heads, giving out the odour of an evening meal, only to be refilled with a fresh hot supply. Flat stones were always in the fires, being heated for the constant ironing to which the faces were subjected; they slid easily over the skin, like a flat-iron on linen, due to the natural oil which exuded from the contracting pores.

Hot coarse pebbles were substituted for sand in the final process, the heads being constantly tilted from side to side to prevent them from burning the meat, as dice are shaken in a box. The small amount of oil still exuding on the face was now wiped away with fresh cotton as fast as it appeared and the operation continued until all the fat and

frease [sic] was 'fried out' of the head when it was considered 'cured' or mummified; shrunk to the last diminutive size attainable.

Even the captive children were playing round the fires, innocent of the hideous import to them of this, the most tragic moment of their lives. Little did they [282] realize that in a few years' time they would themselves be called upon to kill and behead their own kin. Already they were friends with their captors into whose family they had been merged forever.

Thus ended a day unique, I verily believe, in the history of exploration."

4: Up de Graff--282 (1897) 1923 Jivaro
116, 727, 595

"I will add a few remarks concerning the ultimate fate of the trophies whose early history I have told.

The Jívaros never take adult male prisoners, but the women and children who are caught in the periodical raids are given the same standing in the victorious tribe as those who are born into it. Polygamy is forced on the Jívaro peoples by the constant drain on the male population caused by the incessant inter-tribal warfare. But for polygamy they would soon become extinct."

4: Up de Graff--282-283 (1897) 1923 Jivaro
116, 727, 555

"What the scalp is to the North American Indian, the battle-standard to the civilized warrior, the heads are to the Jívaro. But the comparison is only true up to a point. For whereas the glory of the battle-standard and the scalp is undying, that of the Jívaro heads endures only to the end of the great Festival of Rejoicing with which they are honoured on the return of the war-party to their homes.

During the absence of the warriors their women have made ready vast quantities of giamanchi. This preparation contains just enough alcohol to inebriate when taken in enormous quantities, as the savages do on these occasions. Unlike civilized intoxicants its only action is stupefying. The tom-toms are brought out, and men and women throw themselves into the business of dancing and drinking themselves to sleep. The rhythmic beats of the drums resound through the woods for many a long hour. Only the soporific effect of the liquor suffices to bring the orgy to an end.

Afterwards the heads are shorn of their hair, which [283] is converted into permanent trophies in the form of belts to be worn round the loin-cloths of their distinguished owners in battle or at the feast. The possession of such a trophy singles a man out for special regard. But the heads themselves have now lost their value, as surely as pearls which have died. It is curious that the fanatical jealousy with which they are guarded up to the time of the festival should give place to that complete indifference which allows them to be thrown to the children as playthings and finally lost in river or swamp."

4: Up de Graff--285-286 (1897) 1923 Jivaro-1
116, 727, 152, 484

"We were by this time ourselves the object of many a greedy pair of eyes. Those battle-heated savages were in a nasty temper. They were becoming bolder every minute, approaching in groups of five or six in an attempt to borrow our rifles and not always remembering to leave their spears behind them even then. One who was too persistent in his desire to disarm Jack received the butt-end of his Winchester full in his chest, an incident that did not tend to smooth matters over. We were rapidly losing our self-control, much as we wanted to avoid another massacre. There was a lull in the trouble however, when Tuhuimpui came up to pow-wow, still insisting that he 'thought it would be as well if each of us captained a Jívaro dugout, at intervals throughout the long column, to inspire his men with confidence. Our prestige was very great, our power greater. We could save them [286] from disaster, should the Huambizas give chase. We should be a tower of strength to them in the gathering darkness.' All this was highly complimentary, but of course merely served to conceal the crafty designs of that smooth-tongued old scoundrel who coveted our heads and our outfit.

If we were to avoid a rupture of diplomatic relations we must walk carefully. With infinite patience, then, through a conversation lasting, perhaps, a quarter of an hour, I persuaded Tuhuimpui that the most we could do would be for four of us to go two and two, while the fifth took a third canoe. Scarcely veiling his disappointment but forced to give way before our determination not to be massacred singly, he went off at last, and gave the necessary orders. Had we been all separated, doubtless at a given signal, the crew

of each of our canoes would have capsized their craft, themselves diving with their spears, and precipitating us and our Winchesters into the water, where the Jívaros are as much at home as on land, but where our arms would be at a great disadvantage. In a moment we should have been stuck like common paichi."

4: Up de Graff--287-288 (1897) 1923 Jivaro
116, 484, 727

"The grinning skulls of the victims of our raid stared a hideous last look at us from the strand, their naked eyeballs bulging, their dry tongues lolling in a mute farewell. Theirs would never be the good fortune to be buried; disgraced before their fellows they would lie gaping at the sun until the kites and buzzards picked the bones and the dry skulls were swept away by the rising waters to their last resting-place.

In an hour we had made a sand-bar where it was decided to stop for the night. Indeed, by the time my canoe arrived the fires were already blazing, the vanguard having had a few minutes start of us. With the same care as ever, we pitched our camp at a safe distance from that of our 'allies.' Restrained by our show of determination not to be fooled into taking a false step they left us in peace that night. We on our part held another council. Were we to turn back or not?... The boldness of the Jîvaros since their successful raid convinced us that but one thing was wanting to convert a great 'victory' into an overwhelming triumph. A single watch would have been none too safe. All night long the savages sat around their fires, putting the finishing touches to the heads, chattering and gesticulating in the light of the flames.

Next morning we were away as usual with the sun. Once more Tuhuimpui tried to make me see the wisdom of adopting the formation he suggested. Once more [288] I staved him off. So the long line swung down river in the same order, an interval of perhaps a mile between the van and the main body, and the same between the main body and the rear-guard."

4: Up de Graff--288-289 (1897) 1923 Jivaro-1
116, 727, 609

"For an hour we floated along, nothing but the wash of the paddles to break the silence except the occasional squawk of a parrot. In the stem of my canoe sat Tuhuimpui steering. The three paddlers in the bow swayed to and fro with the ceaseless rhythm that knows no fatigue. Game and I amidships, seated back to back with our rifles across our knees, smoked in silence, never losing sight of the Indians for a moment. Tuhuimpui had received his orders--our dugout was on no account to move up from its place in the rear. We were taking no risks that morning.

Two shots from around the long curve down-stream in quick succession roused us from our reverie. In a flash I had swung my rifle to the right and fired full into Tuhuimpui's stomach. The chief wilted and slid into the bilge-water in a heap. I turned to see Game grappling with the nearest of the canoemen, his Winchester gripped at the muzzle by the savage. Before I had time to jump to his assistance, he too had fired and put an end to the scuffle. In a trice the remaining two slipped into the muddy torrent and disappeared. Meanwhile the canoes stretched out ahead, seeing what had happened, shot forward in a suddent [sic] effort to escape our fire. A few shots sent after them convinced them of their folly, and they took to the water, swimming and diving like a school of porpoises at sea. Once in the water they presented a very difficult target. Swimming below water, they would feel for the surface with one hand, bob up for an instant to take a breath, and disappear once more. And so they made their way ashore, abandoning everything in panic-stricken flight. [289]

Jack and Ed. were safe, we knew, for from down-stream came the sound of their firing, the heavy discharge of Jack's .450 followed by the sharper report of Morse's lighter weapon. Anxious to join forces with them, we left the now vacated flotilla of lighter canoes to drift along, and paddled ahead as hard as we could. The alarm had been given, and it was our first duty to see what had befallen our companions after making sure of our rear.

Foreseeing trouble, we had arranged on the night before that in case of a hostile move on the part of the savages, the signal should be two shots fired in rapid succession. It was agreed that they should not be fired without due cause, but that once the alarm was given, each of us would exterminate the Indians in his vicinity. There was to be no hesitation, for, much as we wished to avoid trouble, if trouble came we must meet it instantly. So when the signal shots were fired, we turned on the Jívaros like a flash, knowing that our friends were in great peril, if not already dead."

4: Up de Graff--291 (1897) ?1923 Alvaro

116, 136, 262

"Turtles were plentiful, and we found large quantities of eggs in all stages of incubation; those which contained fully formed live turtles proved even better eating than those not so far advanced."

4: Up de Graff--292 (1897) 1923 Jivaro
116, 136

"Barely three feet long, as thick as a man's thumb, its disproportionately large diamond-shaped head poised on its slender neck (the trade-mark of the venomous snakes) it attacked and chased with surprising temerity so large an antagonist as a man, evidently confident of its power to kill.

Examination showed it to be jet-black, except for the usual light underside. Its head was armed with the customary pair of fangs, about three-quarters of an inch long, and embedded in the membrane of the roof of the mouth were three other pairs, each one a little less developed than the last. Should they lose their fangs, these snakes have the necessary equipment to replace them. Perhaps they cast them periodically, as they do their skins. This specimen was the largest poisonous snake I ever saw in the Amazon basin."

4: Up de Graff--292-293 (1897) 1923 Jivaro
116, 136, 752, 761, 825

"During my six years in the Amazon bush, I did not see more [293] than half a dozen venomous snakes in all, comprising three species, two of them only some fifteen inches long. However small, they kill the native Indians. They succumb to their bite perhaps as much from the psychological effect as from the actual venom. Jack and I were both bitten by the snake which always proves fatal to the Jívaros who neither know of, nor attempt to discover any remedy against their bite. They are hopeless fatalists with regard to this particular catastrophe. They merely say 'I have been bitten,' and lie down to die.

Doubtless there are other species which I have never seen, but at any rate the point which I wish to make, the fact of their comparative rarity, is indisputable. One would expect to find those vast untrodden swamps teeming with every conceivable variety of reptile."